

QY 1677 CCCCAGTACATCTTCC 1693
 |||||
 Db 4 CCGTAACTACATCTTCC 20

RESULT 1658
 AAQ56141/c
 ID AAQ56141 standard; DNA; 21 BP.
 XX

AC AAQ56141;

XX
 DT 25-MAR-2003 (revised)
 DT 08-AUG-1994 (first entry)
 XX

DE Glucose oxidase secretion plasmid construction primer.

KW GOD; enzyme; recombinant; hypoglycosylated; *Aspergillus niger*; yeast;
 expression; *Saccharomyces cerevisiae*; ss.
 XX

OS Synthetic.

PN DE4301904-A1.

PD 10-FEB-1994.

PF 25-JAN-1993; 93DE-04301904.

PR 07-AUG-1992; 92DE-04226095.

PA (BOEF) BOEHRINGER MANNHEIM GMBH.

PI Kopetzki E, Lehnert K;

DR WPI; 1994-049396/07.

PT New hypoglycosylated recombinant glucose oxidase - produced by expressing
Aspergillus GOD gene in yeast mutant with N-glycosylation defect.

PS Example 1; Page 7; 27pp; German.

CC The sequence is that of a primer which was used in the construction of a
 CC plasmid for the secretion of *Aspergillus niger* glucose oxidase (GOD) in
 CC *Saccharomyces cerevisiae*. (Updated on 25-MAR-2003 to correct PN field.)
 XX

SQ Sequence 21 BP; 7 A; 10 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 225 TGAGAGTGTGTGTGTG 241
 |||||
 Db 20 TGTCACTGTGTGTGTG 4

RESULT 1659

AAQ57082/c
 ID AAQ57082 standard; DNA; 21 BP.

AC AAQ57082;

XX
 DT 25-MAR-2003 (revised)
 DT 22-JUL-1994 (first entry)
 XX

DS Plasmid YEPL/GOD-(His)4 construction primer.

KW Amplification; secretion; plasmid; construction; glucose oxidase; ss.

OS Synthetic.

XX EP582244-A2.

PD 09-FEB-1994.
 XX
 XX 02-AUG-1993; 93EP-00112338.
 XX

PR 07-AUG-1992; 92DE-04226094.
 PR 25-JAN-1993; 93DE-04301932.

PA (BOEF) BOEHRINGER MANNHEIM GMBH.
 PA (HOF) ROCHE DIAGNOSTICS GMBH.
 XX

PI Lehle L, Lehnert K, Kopetzki E;

DR WPI; 1994-044288/06.

PT Yeast mutants with N-glycosylation defects - for prodn. of hypo-
 PT glycosylated proteins, including recombinant proteins.

PS Example 1; Page 11; 31pp; German.

CC The sequence is that of a PCR primer which was used in the construction
 CC of plasmid YEPL/GOD-(His)4 as part of the construction of plasmids for
 CC the secretion of *A. niger* glucose oxidase (GOD) in *S. cerevisiae*.
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to
 CC correct PA field.)
 XX

SQ Sequence 21 BP; 7 A; 10 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 225 TGAGAGTGTGTGTGTG 241
 |||||
 Db 20 TGTCACTGTGTGTGTG 4

RESULT 1660

AAT10818
 ID AAT10818 standard; DNA; 21 BP.

AC AAT10818;

XX
 XX 25-MAR-2003 (revised)
 DT 10-APR-1996 (first entry)
 XX

DE Human papilloma virus 6 specific oligonucleotide probe MY12.

KW Human papilloma virus; probe; detection; diagnosis; genital; oral;
 KW carcinomas; research; typing; HPV6; specific; MY12; ss.

OS Synthetic.

PN US5447839-A.

PD 05-SEP-1995.

PF 20-APR-1993; 93US-00050743.

PR 09-SEP-1988; 88US-00243486.

PR 10-MAR-1989; 89US-00322550.

PR 09-SEP-1989; 89WO-US003747.

PR 14-NOV-1990; 90US-00613142.

PA (HOF) HOFFMANN LA ROCHE INC.

PI Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;

DR WPI; 1995-319884/41.

PT Detection of human papilloma virus DNA by amplification - using specific
 PT consensus primer pairs and pref. detection with generic or type specific
 PT probes for use in research and diagnosis.

PS Claim 3; Col 15-16; 36pp; English.

XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
CC to detect, or type HPV for research or diagnostic purposes, e.g. to
CC identify HPV that are implicated in genital or oral carcinomas. (Updated
CC on 25-MAR-2003 to correct PF field.)

XX
SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1677 CCCCACCTACATCTTCC 1693
DB 4 CCGTAACCTACATCTTCC 20

RESULT 1661
AAT00342/C
ID AAT00342 standard; DNA; 21 BP.

XX AAT00342;
AC
XX 14-AUG-1996 (first entry)
DT
XX
XX Family 2 bFGF DNA consensus ligand (experiment 3).
DE
XX
XX Family 1; family 2; ligand; thrombin;
KW Systematic evolution of ligands by exponential enrichment; SLEEX;
KW heparin; selection; region of homology; inhibitor; ss.
XX
XX Synthetic.
OS
XX
XX MO9521853-A1.
PN
XX 17-AUG-1995.
PD
XX
XX 06-FEB-1995; 95WO-US001458.
PF
XX
XX 10-FEB-1994; 94US-00195005.
PR 28-MAR-1994; 94US-00219012.
XX
XX (NEXS-) NEXSTAR PHARM INC.
PA
XX
XX Janjic N, Gold L, Tasset D;
PI
XX WPI; 1995-293073/38.
DR

PT Identification of ligands to basic fibroblast growth factor and thrombin
PT - which can be modified for increased in vivo stability.

PS Claim 21; Page 106; 236pp; English.

XX The sequences given in AAT00282-394 represent DNA ligands to basic
CC fibroblast growth factor (bFGF). These sequences were isolated using the
CC primers and target regions given in AAG38421-29 using systematic
CC evolution of ligands by exponential enrichment (SLEEX). DNA templates
CC containing a region of 30 or 40 random nucleotides flanked by constant
CC sequence regions, were synthesized. The constant regions were designed to
CC be amplified by the primers. The primer 3p7.1ps has 2 biotin
CC phosphoramidites and two additional A residues covalently attached to its
CC 5' terminus during synthesis. The random region was generated by
CC utilizing an equimolar mixture of the four nucleotides during oligo-
CC internal random regions. Three pools of ssDNA were created that contain
CC internal random regions. Each pool was incubated with bFGF at an excess
CC of DNA to target. DNA bound to bFGF were selected by filtration. The
CC selected single stranded DNA (ssDNA) was then amplified by PCR. A
CC significant improvement in affinity of DNA ligands was seen after 10
CC rounds of selection. Five distinct families of ssDNA were identified,
CC based on regions of homology. Some sequences showed no obvious homology
CC to the five families and are considered to be orphans

SQ Sequence 21 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 7 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 57.1%; Pred. No. 1.1e+03;
Matches 12; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 84 CCGCGGCTCTGAGGTGCTCG 104
DB 21 CYGCGGCTCTGAGGTGCTCG 1

RESULT 1662
ADG76459/C
ID ADG76459 standard; DNA; 21 BP.

XX ADG76459;
AC
XX 11-MAR-2004 (first entry)
DT
XX
XX Human leukocyte antigen HLA-A exon 2 probe #15.
DE
XX
XX Human; ss; Human leukocyte antigen; HLA-A; probe; genotyping;
KW tissue typing; transplantation; graft-versus-host disease.
XX
XX Homo sapiens.
OS
XX
XX US5451512-A.
PN
XX 19-SEP-1995.
PD
XX
XX 28-SEP-1993; 93US-00127954.
PF
XX
XX 05-NOV-1991; 91US-00788113.
PR
XX
XX (HOFF) HOFFMANN IA ROCHE INC.
PA
XX
XX Apple RJ, Bugawan TL, Erlich HA;
PI
XX WPI; 1995-336258/43.
DR
XX
XX New oligo:nucleotide primers for HLA-A locus typing - used for typing
PT tissue for e.g. transplantation(s) and identifying individuals or disease
PT susceptibility.
PT
XX
XX Disclosure; SEQ ID NO 15; 80pp; English.
PS
XX
XX The invention relates to a pair of oligonucleotide (ON) primers for
CC amplifying the exon 1-2 region of the HLA-A locus (human leukocyte
CC antigen A), where the pair of primers consists of ONE, RAPI007 and DB337
CC (appearing as ADG76495 and ADG76496). Also included is a method for
CC amplifying a region of the HLA-A locus containing the first and second
CC exons, which consists of carrying out a PCR using the above primers. Also
CC disclosed are HLA-A genotyping probes for exon 2 and 3 and HLA-A allele
CC DNA/protein sequences. The method is used for typing HLA Class I A locus
CC nucleic acids for typing tissue for transplantation, determining
CC individual identity and identifying disease susceptible individuals e.g.
CC graft-versus-host disease. The method provides a rapid and precise system
CC for genotyping the alleles of the HLA-A locus, including those that
CC cannot be distinguished by serological methods. The present sequence is
CC an HLA-A genotyping probe of the invention. Note: The disclosure states
CC that the primers amplify exons 2 and 3, not 1 and 2 as stated in the
CC claims.

XX
SQ Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1239 CTTGATCTTCGATCTCT 1255
DB 18 CTTGATCTTCGATCTCT 2

```

RESULT 1663
AAT35284/C
ID AAT35284 standard; DNA; 21 BP.
XX
AC AAT35284;
XX
DT 09-DEC-1996 (first entry)
XX
DE Chemokine receptor K5.5 primer K5-5B (antisense).
XX
KM Chemokine receptor K5.5; MIP-1-alpha; RANTES; MCP-1; allergy; atheroma;
KM HIV; AIDS; graft rejection; stem cell; primer; ss.
XX
OS Synthetic.
XX
PN MO9623068-A1.
XX
PD 01-AUG-1996.
XX
PF 24-JAN-1996; 96MO-GB000143.
XX
PR 27-JUN-1995; 95GB-00001683.
XX
PA (GLAXO) GLAXO GROUP LTD.
XX
PI Wells TNC, Power CA;
XX
DR WPI; 1996-362692/36.
XX
PT Chemokine receptor which binds MIP-1-alpha, RANTES and/or MCP-1 - useful
PT in screening for agents to treat asthma, hay fever, eczema, allergies,
PT atopic dermatitis, rhinitis or conjunctivitis.
XX
PS Example; Fig 2; 47pp; English.
XX
CC A set of internal sequencing primers (AAT35281-91) were used to sequence
CC cDNA clone E1-C19 (see also AAT35277), which codes for chemokine receptor
CC K5.5 (AAR99274). They were designed on the basis of previous sequencing
CC results
XX
SQ Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 754 GAAGTGTCCCTGCTCAA 770
Db 19 GATGTGTACTGCTCAA 3

```

```

RESULT 1664
AAT44762
ID AAT44762 standard; DNA; 21 BP.
XX
AC AAT44762;
XX
DT 25-MAR-2003 (revised)
DT 29-JUN-1997 (first entry)
XX
DE HPV typing probe MY12 for use with LI consensus primers.
XX
KM Probe; primer; PCR; polymerase chain reaction; amplification;
KM human papillomavirus; consensus; ss.
XX
OS Synthetic.
XX
PN US5527898-A.
XX
PD 18-JUN-1996.
XX
PF 07-JUN-1995; 95US-00474542.

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XX
PR 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 09-SEP-1989; 89MO-US003747.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
PR 24-SEP-1993; 93US-00126452.
XX
PA (HOFF) HOFFMANN LA ROCHE INC.
XX
PI Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PE;
XX WPI; 1996-299903/30.
XX
DR Nucleic acid hybridisation probes - specific for selected human papilloma
XX virus types.
XX
PT Disclosure; Col 31-32; 96pp; English.
XX
PS The invention relates to new oligonucleotide probes and primers used for
XX the detection of human papillomaviruses (HPV) which are not genital types
XX 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used
XX to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The
XX consensus primers can be used to detect these HPV types in conjunction with the
XX consensus primers and typing probes AAT44733-T44906, which are based on
XX and amplify fragments of the L1, E6, E7 and E1 regions of the HPV
XX sequences. Detection of the amplification products is done with probes
XX derived from consensus sequences found in all characterised HPV
XX sequences. Probes AAT44762-810 are examples of HPV typing probes for
XX identifying the amplified products generated by LI consensus primers.
XX This sequence is a sense probe which has specificity for HPV6 and binds
XX to the HPV genome at position 6813. (Updated on 25-MAR-2003 to correct PF
XX field.)
SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1677 CCCGACTACATCTTCC 1693
Db 4 CCGTACTACATCTTCC 20

```

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RESULT 1665
AAT78006
ID AAT78006 standard; DNA; 21 BP.
XX
AC AAT78006;
XX
DT 25-MAR-2003 (revised)
DT 07-OCT-1997 (first entry)
XX
DE Human papillomavirus 6 specific typing probe MY12.
XX
KM Human; papillomavirus 6; HPV6; typing probe; detection; ss.
XX
OS Synthetic.
XX
PN US5639871-A.
XX
PD 17-JUN-1997.
XX
PF 01-JUN-1995; 95US-00457648.
XX
PR 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 29-AUG-1989; 89MO-US003747.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
PR 24-SEP-1993; 93US-00126452.
XX

```

PA (HOFF) ROCHE MOLECULAR SYSTEMS INC.
 XX Imprim CC, Manos MM, Bauer HM, Zhang TY, Greer CE, Resnick RM,
 PI Gravitt PE;
 XX WPI; 1997-332084/30.
 DR
 XX New oligo:nucleotide probes for human papilloma-virus - used for
 PT detecting and typing HPV and for detecting previously unknown HPV types
 PT and subtypes.
 XX
 PS Disclosure: Col 115-116; 94pp; English.
 XX
 CC The present sequence is a human papillomavirus 6 (HPV6) specific typing
 CC probe. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-
 CC 2003 to correct PR field.)
 CC
 SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1677 CCCCACTACATCTTCC 1693
 DB 4 CCGTAACTACATCTTCC 20
 RESULT 1666
 AAV27016
 ID AAV27016 standard; DNA; 21 BP.
 XX
 AC AAV27016;
 XX
 DT 11-SEP-1998 (first entry)
 XX
 DE Homo sapiens gp-Fy PCR primer.
 XX
 XX gp-Fy protein; Fyb71-81; duffy blood group; antigen; alpha; beta;
 KM alternative splicing; RBC; red blood cell; malaria; treatment;
 KM PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN MO9821224-A1.
 XX
 PD 22-MAY-1998.
 XX
 PF 14-NOV-1997; 97WO-US021067.
 XX
 PR 15-NOV-1996; 96US-00749543.
 XX
 XX (NYBL-) NEW YORK BLOOD CENT INC.
 PA
 PI Pogo OA, Chaudhuri A;
 XX
 DR WPI; 1998-297854/26.
 XX
 PT Nucleic acid encoding gp-Fy, Duffy antigen proteins - used to prevent
 PT vivax malaria and to regulate erythrocyte, neutral or renal function.
 PT
 PS Claim 17; Page 32; 87pp; English.
 XX
 CC The sequence is that of a PCR primer p2as which was used in the isolation
 CC of DNA encoding a major subunit of the Duffy blood group antigenic
 CC system, the gp-Fy proteins. The gp-Fy proteins are gp-Fy alpha and gp-Fy
 CC beta which are produced from the same gene via a mRNA splicing mechanism.
 CC It contains the major receptor by which Plasmodium vivax enters red blood
 CC cells (RBC) and causes malaria. The proteins are thus useful in
 CC preventing malaria and in regulating RBC, renal and neural function. The
 CC protein or certain fragments of it, may also be used to generate
 CC antibodies, complementary peptides and drugs modelled on their tertiary

CC structure, useful in the same way
 XX
 SQ Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1146 TCAGTTGACATGTGGG 1162
 DB 1 TCAGTTGACAGGTGGG 17
 RESULT 1667
 AAV17380
 ID AAV17380 standard; DNA; 21 BP.
 XX
 AC AAV17380;
 XX
 DT 25-MAR-2003 (revised)
 DT 04-JUN-1998 (first entry)
 XX
 DE Probe MY12 for human papillomavirus typing.
 XX
 XX Human papillomavirus; HPV; HPV detection; HPV typing;
 KW L1 type-specific probe; ss.
 XX
 OS Synthetic.
 OS Human papillomavirus.
 XX
 PN US5705627-A.
 XX
 PD 06-JAN-1998.
 XX
 PF 26-MAY-1995; 95US-00452055.
 XX
 PR 09-SEP-1988; 88US-00243486.
 PR 10-MAR-1989; 89US-00322550.
 PR 14-NOV-1990; 90US-00613142.
 PR 20-APR-1993; 93US-00050743.
 XX
 PA (HOFF) ROCHE MOLECULAR SYSTEMS INC.
 XX
 PI Ting Y, Resnick RM, Greer CE, Bauer HM, Manos MM;
 XX
 DR WPI; 1998-192210/17.
 XX
 XX Human papilloma probes and primers - useful for, e.g. detecting and
 PT typing of human papilloma viruses.
 PT
 PS Claim 1; Col 15-16; 37pp; English.
 XX
 CC This sequence represents a human papillomavirus (HPV) L1 type-specific
 CC probe of the invention. This sequence may be used in conjunction with L1
 CC specific primers for detecting and typing HPV. Identification and typing
 CC of HPV is important as different types of HPV pose different risks for
 CC infected individuals. HPV6 and HPV18 have been more consistently
 CC identified in higher grades of cervical dysplasia and carcinoma than
 CC other HPV types. (Updated on 25-MAR-2003 to correct PR field.)
 CC
 XX
 SQ Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1677 CCCCACTACATCTTCC 1693
 DB 4 CCGTAACTACATCTTCC 20
 RESULT 1668
 AAV38524


```

ID  AAV38524 standard; DNA; 21 BP.
XX
AC  AAV38524;
XX
DT  08-OCT-1998 (first entry)
XX
DE  PCR primer for prostate specific antigen.
XX
KW  DNA marker; metastatic prostate cancer; human; detection; PCR primer;
KW  disease marker identification; lupus erythematosus; rheumatoid arthritis;
KW  multiple sclerosis; asthma; myasthenia gravis; autoimmune thyroiditis;
KW  amyloid lateral sclerosis; interstitial cystitis; prostatitis;
KW  prostate specific antigen; ss.
XX
OS  Synthetic.
OS  Homo sapiens.
XX
PN  WO9824935-A1.
XX
PD  11-JUN-1998.
XX
PF  05-DEC-1997; 97WO-US022105.
XX
PR  06-DEC-1996; 96US-0032619P.
PR  12-DEC-1996; 96US-0032701P.
PR  24-MAR-1997; 97US-0041576P.
XX
PA  (UROC-) UROCOR INC.
XX
PI  Ralph D, An G, Ohara M, Veltri R;
XX
DR  WPI; 1998-333350/29.
XX
PT  Identifying markers for disease states - by amplifying RNA from
PT  peripheral blood and identifying RNA which is differential expressed
PT  between normal and disease state subjects.
XX
PS  Example 6; Page 98; 158pp; English.
XX
XX  This sequence is a PCR primer for the gene encoding the prostate specific
XX  antigen, and were used in the method of the invention. The method is for
XX  identifying markers for a disease state, and comprises: (a) providing a
XX  first set of peripheral blood mRNAs from one or more subjects known to
XX  exhibit the disease state and a second set of peripheral blood mRNAs from
XX  one or more normal subjects; (b) amplifying both sets of mRNAs to provide
XX  nucleic acid amplification products; (c) comparing the sets of
XX  amplification products; and (d) identifying those mRNAs that are
XX  differentially expressed between normal subjects and subjects exhibiting
XX  the disease state; where a difference in quantity of expression of an
XX  mRNA is indicative of a disease marker. The identified marker sequence
XX  can be used in a method of detecting a metastatic cancer disease state,
XX  especially for detection of prostate cancer. Using the methods, a disease
XX  state may be detected, diagnosed, or a prognosis may be delivered by
XX  examining a blood sample rather than relying on a more invasive, or less
XX  sensitive test. In addition, a subject may be monitored for disease
XX  progression, status and response to therapies through monitoring of
XX  differentially expressed disease markers. The methods can be used for
XX  diseases such as cancer (especially metastatic or prostate cancer),
XX  asthma, lupus erythematosus, rheumatoid arthritis, multiple sclerosis,
XX  myasthenia gravis, autoimmune thyroiditis, amyloid lateral sclerosis,
XX  interstitial cystitis, prostatitis or other systemic or chronic conditions
XX
SQ  Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1461 CCTCAGCTGGGGAGC 1477
DB  2 CCTCAGCTGGGGAGC 18

```

```

RESULT 1669
AAV40603
ID  AAV40603 standard; DNA; 21 BP.
XX
AC  AAV40603;
XX
DT  21-DEC-1998 (first entry)
XX
DE  Human TSC gene exon 19 forward primer hTSCex19.
XX
KW  Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;
KW  ion transport; Gitelman's syndrome; Bartter's syndrome;
KW  hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;
KW  therapy; SSCP; primer; ss.
XX
OS  Synthetic.
OS  Homo sapiens.
XX
PN  WO9829431-A1.
XX
PD  09-JUL-1998.
XX
PF  19-DEC-1997; 97WO-US023553.
XX
PR  31-DEC-1996; 96US-00778052.
XX
PA  (UYVA ) UNIV YALE.
XX
PI  Lifton RP, Simon DB;
XX
DR  WPI; 1998-388029/33.
XX
PT  Thiazide sensitive cotransporter and ATP sensitive potassium channel
PT  genes - useful for developing products for the diagnosis and treatment of
PT  ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
XX
PS  Example 1; Page 51; 105pp; English.
XX
XX  Primers hTSCex19 forward and reverse (see AAV40603 and AAV40604,
XX  respectively) are designed to amplify exon 19 of the human hTSC gene (see
XX  AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see
XX  AAV29682). Both primers are located within introns of hTSC. 27 sets of
XX  specific primers (see AAV40565-VA0618) were used for SSCP analysis of
XX  hTSC. Amplified products were analysed for molecular variants by
XX  electrophoresis, and identified variants were sequenced. Complete linkage
XX  of Gitelman's syndrome with TSC was demonstrated. Identification of the
XX  molecular basis of Gitelman's syndrome allows for the genetic diagnosis
XX  of this disorder. The invention provides products and methods useful for
XX  diagnosis and treatment of Gitelman's syndrome and other ion transport
XX  disorders
XX
SQ  Sequence 21 BP; 5 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  516 GGAGAGCTGACCTCA 532
DB  1 GGAGAGCTGACCTCA 17

RESULT 1670
AAZ25918/c
ID  AAZ25918 standard; DNA; 21 BP.
XX
AC  AAZ25918;
XX
DT  30-NOV-1999 (first entry)
XX
DE  Human polymorphic region 107.
XX
KW  Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;

```

KW cell viability; loss of heterozygosity; precancerous condition; ASi;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN M09841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP,
XX
DR WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX dysplastic lesions, endometriosis or graft versus host disease.
XX
PS Example 14; Fig 1; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASi) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AA25812-226825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 2 A; 5 C; 10 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 741 CACCGCATCCGGAG 757
DB 19 CACCGCATCTGGAG 3
RESULT 1671
AA230746
ID AA230746 standard; DNA; 21 BP.
XX
AC AA230746;
XX
DT 19-JAN-2000 (first entry)
XX
DE Human prostate specific antigen PCR primer #15.
XX
XX prostate specific antigen; DNaseI; marker; expression; diagnosis;
XX differential; disease; cancer; metastatic; breast cancer; prostate;
KW peripheral leukocyte; immune response; asthma; lupus erythematosus;
KW rheumatoid arthritis; multiple sclerosis; myasthenia gravis;
KW autoimmune thyroiditis; amyotrophic lateral sclerosis; ALS;

KW interstitial cystitis; prostatitis; mRNA; PCR; reverse transcriptase-PCR;
KW RT-PCR; screening; early; diagnosis; prognosis; monitoring; primer; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN M09949083-A1.
XX
PD 30-SEP-1999.
XX
PF 24-MAR-1999; 99WO-US006488.
XX
PR 24-MAR-1998; 98US-00046894.
XX
PA (UROCC-) UROCCOR INC.
XX
PI Ralph D, An G, O'hara SM, Velturi RW;
XX
DR WPI; 1999-591105/50.
XX
PT Identifying markers of human disease, specifically for diagnosis of
PT metastatic prostatic and breast cancers.
XX
PS Disclosure; Page 101, 225pp; English.
XX
CC This sequence represents human prostate specific antigen (PSA) PCR primer
CC #15, used with PCR primer #16 (AA230747) in experiments to confirm
CC whether a sample of total cell RNA treated with DNaseI is completely free
CC of DNA. If contaminating DNA is present, these primers will amplify a PCR
CC product, which can be visualised via agarose gel electrophoresis. Once
CC DNA has been completely removed from total cell RNA, the RNA can be used
CC as a template for relative quantitative reverse transcriptase-PCR (RT-PCR)
CC amplification of novel markers of human disease (AA230713-230719). These
CC markers are differentially expressed in peripheral leukocytes between
CC healthy subjects and patients with metastatic cancers (especially those
CC of the prostate or breast). Detecting levels of such human disease
CC markers is used for diagnosis (also prognosis and monitoring) of
CC diseases, including metastatic or organ-confined cancers, and diseases
CC which also elicit an immune response such as asthma, lupus erythematosus,
CC rheumatoid arthritis, multiple sclerosis, myasthenia gravis, autoimmune
CC thyroiditis, amyotrophic lateral sclerosis (ALS), interstitial cystitis
CC and prostatitis, but especially metastatic prostatic and breast cancer. A
CC particular use is differentiating between prostatic cancer and benign
CC cancer, by multivariate analysis of several different markers. Cancers
CC can be treated by administering sequences antisense to sequences that
CC encode human disease markers. The method detects a leukocyte response to
CC disease rather than products of diseased cells. Disease can be detected at an
CC early stage, when few, if any, diseased cells are present in the
CC circulation. Analysis of blood samples eliminates the need for more
CC invasive methods for obtaining samples
XX
SQ Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1461 CCTCAGTCTGGGGAGC 1477
DB 2 CCTCAGGCTGGGGAGC 18
RESULT 1672
AA278886
ID AA278886 standard; DNA; 21 BP.
XX
AC AA278886;
XX
DT 08-SEP-1999 (first entry)
XX
DE Human plasminogen PCR primer plg+289.

```
XX Tissue factor; human; thrombogenic; substructure; thrombose; tumour;
KM vascular malformation; vascular endothelium; plasminogen; PCR primer;
KM ss.
XX Homo sapiens.
XX MO932143-A1.
XX 01-UTL-1999.
XX 22-DEC-1998; 98WO-US027498.
XX 23-DEC-1997; 97US-00996744.
XX (NUVA-) NUVAS LLC.
XX Houston IL, Dickinson CD;
XX WPI; 1999-405116/34.
XX New thrombogenic polypeptides used to, e.g. obliterate vasculative
XX malformations.
XX Example 8; Page 81; 97pp; English.
XX This invention describes novel thrombogenic polypeptides which comprise a
XX thrombogenic substructure and a context-dependent entity which recognizes
XX desired biologically susceptible sites, e.g. tumour vascular endothelium.
XX A novel context-dependent functional entity comprises a substructure with
XX thrombogenic potential and one or more context-enhancing substructures
XX having the ability to recognize desired biologically susceptible sites,
XX where the entity imparts thrombogenic activity when positioned in the
XX function-forming context at the biologically susceptible sites, and the
XX entity has no thrombogenic activity absent a function-forming context at
XX the biologically susceptible sites. The context-dependent functional
XX entities impart thrombogenic activity only at biologically susceptible
XX sites. They can be used to obliterate vasculative malformations or to
XX selectively thrombose the vasculature of solid tumours. This sequence
XX represents a human plasminogen PCR primer used in the method of the
XX invention
XX
XX Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 874 CTGATGACTGTGGGAA 890
Db 4 CTGATGACTGTGGAA 20
RESULT 1673
AAC69272/c
ID AAC69272 standard; DNA; 21 BP.
XX
XX AAC69272;
XX
XX 29-JAN-2001 (first entry)
XX
XX Human ABC1 gene exon 7 fragment corrected sequence, SEQ ID NO:171.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
XX ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
XX Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
XX cardiovascular disease; coronary artery disease; coronary restenosis;
XX cerebrovascular disease; peripheral vascular disease;
XX Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
XX X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
XX prognosis; prophylaxis; drug screening; transgenic animal; ds.
XX
XX Homo sapiens.
OS
```

```
XX
XX WO200055318-A2.
XX
XX 21-SEP-2000.
XX
XX 15-MAR-2000; 2000WO-IB000532.
XX
XX 15-MAR-1999; 99US-0124702P.
XX 08-JUN-1999; 99US-0138048P.
XX 17-JUN-1999; 99US-0139600P.
XX 01-SEP-1999; 99US-0151977P.
XX
XX (UYBR-) UNIV BRITISH COLUMBIA.
XX (XENO-) XENON BIORESEARCH INC.
XX
XX Hayden MR, Wilson AR, Pimstone SN;
XX
XX WPI; 2000-587528/55.
XX
XX New ABC1 polypeptide is useful for treating diseases associated with ABC1
XX biological activity, e.g. Alzheimer's disease, Huntington's disease and
XX cancer.
XX Example; Fig 11; 229pp; English.
XX
XX The invention relates to the human ABC1 cholesterol transporter protein
XX (B3082) and to nucleic acid sequences (C69120) which encode it. ABC1 is
XX a member of the ATP-binding cassette (ABC transporter) superfamily of
XX proteins, and plays a crucial role in cholesterol transport, particularly
XX intracellular cholesterol trafficking in monocytes and fibroblasts, being
XX involved in cholesterol efflux from the cell. The gene encoding ABC1 is
XX located on chromosome 9q31, and mutations in this gene are associated
XX with two genetic HDL (high density lipoprotein) deficiency disorders,
XX Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
XX are distinguishable in that TD is an autosomal recessive disorder, while
XX FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
XX cholesterol") in the blood correlate with a high risk of cardiovascular
XX disease, particularly coronary artery disease, but also cerebrovascular
XX disease, coronary restenosis, and peripheral vascular disease.
XX Conversely, a high level of HDL has protective effects against
XX cardiovascular disease. The invention provides genetic constructs and
XX transgenic cells and non-human animals comprising human ABC1 nucleic
XX acids, and methods of gene therapy for the treatment or prevention of
XX cardiovascular disease comprising the administration of an expression
XX vector encoding ABC1 or an active fragment thereof. The invention also
XX encompasses compounds which mimic ABC1 activity, compounds which
XX stimulate ABC1 expression and methods of screening for such compounds. It
XX further relates to methods for determining whether a patient has an
XX increased risk for cardiovascular disease due to polymorphisms in the
XX ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
XX prevent cardiovascular disease, especially coronary artery disease,
XX cerebrovascular disease, coronary restenosis or peripheral vascular
XX disease. They may also be used in the treatment of diseases associated
XX with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
XX disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
XX The invention specifically excludes proteins with the exact amino acid
XX sequences of GenBank Accession No: CAA10005.1 and X75925 and the nucleic
XX acid with the exact sequence as GenBank Accession No: AJ012376.1.
XX Sequences C69269-C69282 represent published and corrected versions of
XX human ABC1 gene exon fragments
XX
XX Sequence 21 BP; 7 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 375 GGCTTCAGCCACGCTCT 391
Db 17 GGCTTCAGCCACGCTCCT 1
RESULT 1674
```

AAZ60648/c
 ID AAZ60648 standard; DNA; 21 BP.
 XX
 AC AAZ60648;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE PCR primer used to amplify kappa3-related opioid receptor cDNA.
 XX
 XX Splice variant; kappa3 opioid receptor; muopioid receptor-1; KOR-3;
 KW morphine analgesia; opioid-mediated ingestive response; opioid;
 KW analgesic; gastrointestinal motility; respiration; immune system;
 KW endocrine system; autonomous nervous system; peristalsis regulator;
 KM body weight; neuroendocrine disorder; PCR primer; ss.
 XX
 OS Mus sp.
 XX
 PN WO200004151-A2.
 XX
 PD 27-JAN-2000.
 XX
 PF 15-JUL-1999; 99WO-US015977.
 XX
 PR 16-JUL-1998; 98US-0093002P.
 XX
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 PI Pasternak G, Pan Y;
 XX
 DR WPI; 2000-182421/16.
 XX
 PT New splice variants of the kappa-opioid receptor, useful in screening for
 PT selective analgesics and for regulating morphine analgesia or body
 PT weight.
 XX
 PS Example 1; Page 29; 61pp; English.
 XX
 CC PCR primers AAZ60647-48 were used to amplify cDNA fragments of the murine
 CC kappa3 opioid receptor (muopioid receptor-1, KOR-3). The specification
 CC describes four new exons of the KOR-3 gene, which combine to yield seven
 CC new KOR-3 splice variants of human, mouse and rat origin. These splice
 CC variants are potential targets for modulating morphine analgesia and
 CC opioid-mediated ingestive responses. The KOR-3 polypeptide are used to
 CC screen compounds for opioid activity. Such compounds are potential
 CC analgesics or more generally agents that affect gastrointestinal
 CC motility, respiration or the immune, endocrine or autonomous nervous
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and
 CC ligands of KOR-3, as well as DNA vectors expressing KOR-3-encoding
 CC nucleic acids, or sequences antisense to KOR-3 nucleic acids, are used to
 CC regulate morphine analgesia and body weight. The level of KOR-3 or tissue
 CC distribution of KOR-3 can be measured to diagnose KOR-3 related
 CC pharmacological abnormalities or neuroendocrine disorders, particularly
 CC inherited disorders. Transgenic animals with extra copies of the KOR-3
 CC gene, or with endogenous alleles deleted, are used to study loss or gain
 CC of function phenotypes
 XX
 SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 QY
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Db 681 CACGACACCTTGTGG 697
 18 CACGACATCCTCTGG 2
 RESULT 1675
 AAZ60652/c
 ID AAZ60652 standard; DNA; 21 BP.
 XX
 AC AAZ60652;
 XX

DT 16-MAY-2000 (first entry)
 XX
 DE PCR primer used to amplify kappa3-related opioid receptor cDNA.
 XX
 XX Splice variant; kappa3 opioid receptor; muopioid receptor-1; KOR-3;
 KW morphine analgesia; opioid-mediated ingestive response; opioid;
 KW analgesic; gastrointestinal motility; respiration; immune system;
 KW endocrine system; autonomous nervous system; peristalsis regulator;
 KM body weight; neuroendocrine disorder; PCR primer; ss.
 XX
 OS Mus sp.
 XX
 PN WO200004151-A2.
 XX
 PD 27-JAN-2000.
 XX
 PF 15-JUL-1999; 99WO-US015977.
 XX
 PR 16-JUL-1998; 98US-0093002P.
 XX
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 PI Pasternak G, Pan Y;
 XX
 DR WPI; 2000-182421/16.
 XX
 PT New splice variants of the kappa-opioid receptor, useful in screening for
 PT selective analgesics and for regulating morphine analgesia or body
 PT weight.
 XX
 PS Example 1; Page 30; 61pp; English.
 XX
 CC PCR primers AAZ60651-52 were used to amplify cDNA fragments of the murine
 CC kappa3 opioid receptor (muopioid receptor-1, KOR-3). The specification
 CC describes four new exons of the KOR-3 gene, which combine to yield seven
 CC new KOR-3 splice variants of human, mouse and rat origin. These splice
 CC variants are potential targets for modulating morphine analgesia and
 CC opioid-mediated ingestive responses. The KOR-3 polypeptide are used to
 CC screen compounds for opioid activity. Such compounds are potential
 CC analgesics or more generally agents that affect gastrointestinal
 CC motility, respiration or the immune, endocrine or autonomous nervous
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and
 CC ligands of KOR-3, as well as DNA vectors expressing KOR-3-encoding
 CC nucleic acids, or sequences antisense to KOR-3 nucleic acids, are used to
 CC regulate morphine analgesia and body weight. The level of KOR-3 or tissue
 CC distribution of KOR-3 can be measured to diagnose KOR-3 related
 CC pharmacological abnormalities or neuroendocrine disorders, particularly
 CC inherited disorders. Transgenic animals with extra copies of the KOR-3
 CC gene, or with endogenous alleles deleted, are used to study loss or gain
 CC of function phenotypes
 XX
 SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 QY
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Db 681 CACGACACCTTGTGG 697
 18 CACGACATCCTCTGG 2
 RESULT 1676
 AAZ77136
 ID AAZ77136 standard; DNA; 21 BP.
 XX
 AC AAZ77136;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:11492.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;

KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW amplification; hybridisation; identification; characterisation;
KW diagnosis; ss.
XX Homo sapiens.
XX
XX MO9954500-A2.
XX
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX (GEST) GENSET.
XX
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX
XX PT Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX PS Claim 9; Page 2680; 2745pp; English.
XX
XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 364 GAGAGTGACCGGCTTC 380
DB |||||
2 GAGAGTTACTTAGGCTTC 18
RESULT 1677
AAZ76024
ID AAZ76024 standard; DNA; 21 BP.
XX
XX AAZ76024;
XX
XX DT 10-SEP-2001 (first entry)
XX
XX DE Human biallelic marker downstream amplification primer SEQ ID NO:10380.
XX
XX KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX OS Homo sapiens.
XX
XX PN MO9954500-A2.

XX
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX (GEST) GENSET.
XX
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX
XX PT Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX PS Claim 9; Page 2443; 2745pp; English.
XX
XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
SQ Sequence 21 BP; 7 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1445 TGAACATCATCTCTTC 1461
DB |||||
5 TGAACATCATCTCTTC 21
RESULT 1678
AAF95402/C
ID AAF95402 standard; DNA; 21 BP.
XX
XX AAF95402;
XX
XX DT 06-JUN-2001 (first entry)
XX
XX DE Human gene single nucleotide polymorphism #163.
XX
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
XX OS Homo sapiens.
XX
XX DE Key Location/Qualifiers
XX FT replace(11,T)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN MO200118250-A2.
XX
XX PD 15-MAR-2001.
XX
XX PF 07-SEP-2000; 2000WO-US024503.

```

XX 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland US, Bolk S, Daley GO, Mccarthy JU;
XX WPI, 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 59; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
SQ Sequence 21 BP; 6 A; 11 C; 2 G; 2 T; 0 U; 0 Other;
QY
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 226 GAGAGTGTGTGTGTGG 242
21 GAGTGTGTGTGTGTGTG 5
RESULT 1679
AAF95850/C
ID AAF95850 standard; DNA; 21 BP.
XX
AC AAF95850;
XX
XX 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #611.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,T)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.

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XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland US, Bolk S, Daley GO, Mccarthy JU;
XX WPI, 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 90; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
SQ Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
QY
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 190 AAGACCAATGTGTGCCCC 206
21 AAGACTAATGTGTGCCAC 5
RESULT 1680
AAF97421/C
ID AAF97421 standard; DNA; 21 BP.
XX
AC AAF97421;
XX
XX 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #2182.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,G)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.

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```
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 198; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 392 CGAATGAGGTGCACTCT 408
DB 20 CTGTTGAGGTGCACTCT 4
XX
RESULT 1681
AAF96964
ID AAF96964 standard; DNA; 21 BP.
XX
AC AAF96964;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #1725.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
EN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
XX
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX WPI; 2001-226749/23.
XX
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```
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 163; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 3 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1031 CTGACTTTGGCTGGCC 1047
DB 1 CTGACTTTGGCTGGCC 17
XX
RESULT 1682
AAF96582
ID AAF96582 standard; DNA; 21 BP.
XX
AC AAF96582;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #1343.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,A)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
EN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
XX
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
```

XX Example; Page 140; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred.No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1268 CTGAGGAGACGTGGCCA 1284
Db 1 CTATGGAGACGTGGCCA 17
RESULT 1683
AAF93032/C
ID AAF93032 standard; DNA; 21 BP.
XX
AC AAF93032;
XX
DT 17-MAY-2001 (first entry)
XX
DE Partial exon 7 corrected sequence.
XX
KW High density lipoprotein-cholesterol; HDL-C; cardiovascular; ABCI; ds.
XX
XX Homo sapiens.
XX
PN WO200115676-A2.
XX
PD 08-MAR-2001.
XX
PF 01-SEP-2000; 2000MO-IB001492.
XX
PR 01-SEP-1999; 99US-0151977P.
PR 15-MAR-2000; 2000US-00526193.
PR 23-JUN-2000; 2000US-0213958P.
XX
PA (UYBR-) UNIV BRITISH COLUMBIA.
PA (XENO-) XENON GENETICS INC.
XX
PI Hayden MR, Brooks-Wilson AR, Pimstone SN, Clee SM;
XX
DR WPI; 2001-244356/25.
XX
PT Treating a lower than normal high density lipoprotein-cholesterol (HDL-C)
PT level, a higher than normal triglyceride level, or a cardiovascular
PT disease, by administering a compound that modulates LXR- or RXR-mediated
PT transcriptional activity.
XX
PS Disclosure; Fig 4; 317pp; English.
XX
XX The present invention relates to a method for treating a patient
CC diagnosed as having a lower than normal high density lipoprotein-
CC cholesterol (HDL-C) level, a higher than normal triglyceride level, or a
CC cardiovascular disease, involving administering a compound that modulates
CC LXR- or RXR-mediated transcriptional activity or ABCI expression or
CC activity. The LXR gene product may be used in an assay to identify
CC compounds useful for the treatment of a disease or condition selected a
CC lower than normal HDL cholesterol level, a higher than normal
CC triglyceride level, and a cardiovascular disease

XX
SQ Sequence 21 BP; 7 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred.No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 375 GGCCTCAGCCACGTCCT 391
Db 17 GGCCTCAGCCACGTCCT 1
RESULT 1684
AAH40230/C
ID AAH40230 standard; DNA; 21 BP.
XX
AC AAH40230;
XX
DT 14-AUG-2001 (first entry)
XX
DE SNP specific lower PCR primer SEQ ID 3026.
XX
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
XX Homo sapiens.
XX
PN WO200129262-A2.
XX
PD 26-APR-2001.
XX
PF 13-OCT-2000; 2000MO-US028436.
XX
PR 15-OCT-1999; 99US-0160096P.
XX
PA (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI Picoult-Newburg L, Pohl M;
XX
DR WPI; 2001-290930/30.
XX
PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX
PS Claim 1; Page 65; 83pp; English.
XX
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific

CC for a human SNP containing DNA sequence
 XX Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 751 CCGGAGTGTCCCGCT 767
 Db 17 CAGGAATTCTCCCT 1

RESULT 1685
 AAF70928/c
 ID AAF70928 standard; DNA; 21 BP.
 XX

AC AAF70928;

DT 20-APR-2001 (first entry)

DE bFGF DNA ligand #61.

XX ligand; basic fibroblast growth factor; bFGF; gene therapy; vascular;
 XX atherosclerosis; angioplasty; stability; ss.

OS Unidentified.

XX US6177557-B1.

XX 23-JAN-2001.

XX 05-AUG-1996; 96US-00687421.

XX 11-JUN-1990; 90US-00536428.

XX 10-JUN-1991; 91US-00714131.

XX 06-NOV-1992; 92US-00973333.

XX 10-FEB-1994; 94US-00195005.

XX 28-MAR-1994; 94US-00219012.

XX (NEXS-) NEXSTAR PHARM INC.

XX Janjic N, Gold L, Tasset D;

XX WPI; 2001-158583/16.

XX Novel nucleic acid ligands to basic fibroblast growth factor that are

XX useful as inhibitors of basic fibroblast growth factors and 2'-amino

XX modified RNA ligands, exhibit increased in vivo stability.

XX Claim 1; Col 69-75; 153pp; English.

XX The present invention relates to a purified and isolated non-naturally

XX occurring DNA ligands to basic fibroblast growth factor (bFGF). The

XX ligands are useful as part of gene therapy treatments and for diagnosing

XX pathogenesis of vascular diseases including initiation and progression of

XX atherosclerosis, acute coronary syndromes, vein graft disease and

XX stenosis following coronary angioplasty. The ligands have improved

XX stability in vivo

SQ Sequence 21 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 7 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;

Best Local Similarity 57.1%; Pred. No. 1.1e+03;

Matches 12; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 84 CCGGAGTGTCCCGCTCG 104

Db 21 CYGGGCTCTGAATCTCTCG 1

RESULT 1686

AAFS5160/c

ID AAF55160 standard; DNA; 21 BP.

XX AAF55160;

XX 29-MAY-2001 (first entry)

DE Probe used to identify human hypocretin (orexin) receptor 1 gene.

XX Human; hypocretin receptor 1; orexin receptor 1; HCRTR1; chromosome 1;

XX 1p33; central nervous system modulator; probe; ss.

OS Homo sapiens.

XX WO200114555-A1.

XX 01-MAR-2001.

XX 22-AUG-2000; 2000WO-US022986.

XX 23-AUG-1999; 99US-00379083.

XX 07-JAN-2000; 2000US-00479128.

XX (DECO-) DECODE GENETICS EHF.

XX Olafsdottir BR, Gulcher J;

XX WPI; 2001-211306/21.

XX Novel isolated nucleic acid molecule encoding hypocretin (orexin)

XX receptor 1 useful for treating and diagnosing narcolepsy.

XX Example 1; Page 20; 44pp; English.

XX Probes AAF55160-76 were used to identify a human hypocretin (orexin)

XX receptor 1 (HCRTR1) gene. The HCRTR1 gene is present on chromosome 1,

XX associated with narcolepsy. HCRTR1 is a central nervous system modulator.

XX The HCRTR1 polypeptide and polynucleotide are useful for diagnosing or

XX treating narcolepsy in an individual. The HCRTR1 polynucleotide is a

XX source of probes and primers, and is also used to produce the protein

XX recombinantly

SQ Sequence 21 BP; 6 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;

Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1480 ATCCACAACTCTCTGA 1496

Db 17 AGCTCAAACTTCTCTGA 1

RESULT 1687

AAH89038/c

ID AAH89038 standard; DNA; 21 BP.

XX AAH89038;

XX 09-SEP-2004 (revised)

XX 27-FEB-2002 (first entry)

XX Human polymorphic oligonucleotide AC005336 fragment #5.

XX Human; single nucleotide polymorphic; SNP; forensic science;

XX paternity testing; phenotypic trait; genetic mapping; animal breeding;

XX plant breeding; ds.

XX Homo sapiens.

XX Unidentified.

XX Key Location/Qualifiers

XX Variation 11

```
FT      /*tag= a
FT      /standard_name= "single nucleotide polymorphism"
XX
XX      WO200134840-A2.
XX
XX      17-MAY-2001.
XX
XX      10-NOV-2000; 2000WO-US030766.
XX
XX      10-NOV-1999; 99US-0164596P.
XX
XX      (GLAX ) GLAXO GROUP LTD.
XX      (AFRY-) AFRYMETRIX INC.
XX
XX      Au K, Chen J, Patil N, Thomas D;
XX
XX      WPI; 2001-335945/35.
XX
XX      New polymorphic sites derived from the human genome are useful to
XX      determine sites correlating with phenotypic traits, particularly disease,
XX      and also in forensics and paternity testing.
XX
XX      Claim 71; Page 12; 43pp; English.
XX
XX      The present invention relates to human oligonucleotides comprising a
XX      single nucleotide polymorphic site (SNP: AAH8797-AAH89219). The present
XX      sequence is one such oligonucleotide. The oligonucleotides can be used in
XX      forensics, paternity testing, correlation of polymorphisms with
XX      phenotypic traits, genetic mapping of phenotypic traits and marker
XX      assisted breeding of animals and crop plants
XX
XX      Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
XX      Sequence 21 BP; 4 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.8; DB 1; Length 21;
XX      Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX      198 TGGTGCCCTGAGCAGA 214
XX      19 TGGAGCCCTGAGCTGA 3
XX
XX      RESULT 1688
XX      ABA01349
XX      ID ABA01349 standard; RNA; 21 BP.
XX
XX      AC ABA01349;
XX
XX      03-JUL-2002 (first entry)
XX
XX      YMPD oligonucleotide #9.
XX
XX      Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX
XX      Simian immunodeficiency virus.
XX
XX      US6303295-B1.
XX
XX      16-OCT-2001.
XX
XX      12-JUL-1996; 96US-00679493.
XX
XX      14-JUL-1995; 95US-0001203P.
XX      01-SEP-1995; 95US-0003112P.
XX
XX      (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
XX      Taylor EW, Nadiimpalli RG, Ramanathan CS;
XX
XX      WPI; 2002-024734/03.
XX
```

```
PT      New selenoprotein for use in detecting certain viruses, e.g. human
PT      immunodeficiency virus (HIV) or Ebola, cancer and immune system
PT      disorders.
XX
XX      PS Disclosure; Col 69-70; 140pp; English.
XX
XX      The present invention relates to selenoproteins encoded in the genome of
XX      a virus, where the coding sequence of the selenoprotein is genetically
XX      engineered for expression in a nucleic acid construct. The invention also
XX      discloses a method for identifying selenoprotein coding sequences, for
XX      detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX      disorders. The present sequence was used to illustrate the invention
XX
XX      Sequence 21 BP; 7 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.8; DB 1; Length 21;
XX      Best Local Similarity 70.6%; Pred. No. 1.1e+03;
XX      Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
XX
XX      866 AGCAGTACTCGATGATAC 882
XX      5 ACCAGUACAGGAGUAGAC 21
XX
XX      RESULT 1689
XX      ABA91520
XX      ID ABA91520 standard; DNA; 21 BP.
XX
XX      AC ABA91520;
XX
XX      23-APR-2002 (first entry)
XX
XX      DNA probe for human papilloma virus genotyping.
XX
XX      HPV; genotyping; nucleic acid detection; probe; ss.
XX
XX      OS Human papillomavirus.
XX      WO200206531-A2.
XX
XX      24-JAN-2002.
XX
XX      12-JUL-2001; 2001WO-US022166.
XX
XX      14-JUL-2000; 2000US-00616761.
XX      30-MAR-2001; 2001US-00823647.
XX
XX      (GENE-) APPLIED GENE TECHNOLOGIES INC.
XX
XX      Datagupta N;
XX
XX      WPI; 2002-171819/22.
XX
XX      Probes for detecting target nucleotide sequence in sample, has sequence
XX      that forms hairpin structure having a double-stranded segment and single-
XX      stranded loop collectively forming region complementary to target
XX      sequence.
XX
XX      Example 1; Page 44; 72pp; English.
XX
XX      The present sequence comprises a probe for human papillomavirus (HPV)
XX      genotyping that was used in an example of the use of hairpin probes in
XX      nucleic acid hybridisation analysis. The probe sequence is present within
XX      the 5' stem portion of an RNA-DNA probe (see ABA91521) that is capable of
XX      forming a hairpin structure. The DNA portion of the hairpin probe
XX      includes methylphosphonates. The hairpin probe is immobilised onto a
XX      membrane by BSA conjugation and the resulting probe-containing strip is
XX      contacted with HPV genomic DNA. After hybridisation, the strip is treated
XX      with RNase H to digest the portion of the hybridised probe with RNA-DNA
XX      structure. A second hybridisation is then performed using biotin-labelled
XX      probes, which are complementary to the portions of immobilised probe that
XX      become single-stranded after hybridisation and digestion. Biotin in the
XX      hybrid is detected by streptavidin-horseradish peroxidase conjugate
XX
```

CC chemiluminescence. This is an example of the use of hairpin probes that
 CC are capable of both intramolecular and intermolecular hybridisation and
 CC in which the nucleotide sequence that is complementary to the target
 CC sequence is located entirely within the double-stranded portion of the
 CC hairpin probe. The use of such probes reduces background hybridisation,
 CC thereby improving specificity

Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1677 CCCCACATACATCTTC 1693

DB 4 CCCTACTACATCTTCC 20

RESULT 1690

ABK65477/c

ID ABK65477 standard; DNA; 21 BP.

ABK65477;

02-JUL-2002 (first entry)

Human single nucleotide polymorphism #97.

Human; single nucleotide polymorphism; SNP; sickle cell anaemia;

agamaglobulinemia; diabetes insipidus; Lesch-Nyhan syndrome;

familial hypercholesterolemia; polycystic kidney disease; cancer;

hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;

Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;

acute intermittent porphyria; inflammation; nervous system disorder;

infection; rheumatoid arthritis; multiple sclerosis; diabetes;

systemic lupus erythematosus; Graves disease; longevity; obesity;

balanitis; fertility; forensic; paternity testing; ss.

Homo sapiens.

US2002037508-A1.

28-MAR-2002.

18-JAN-2001; 2001US-00765081.

19-JAN-2000; 2000US-0176861P.

(CARG/) CARGILL M.

(IREL/) IRELAND J S.

(LAND/) LANDER E S.

Cargill M, Ireland JS, Lander ES;

WPI; 2002-315108/35.

Nucleic acid comprising single nucleotide polymorphisms, useful in

forensic, paternity testing and diagnosis of disease.

Claim 1; Page 46; 96pp; English.

The invention relates to a nucleic acid comprising single nucleotide

polymorphisms (SNPs) associated with diseases. The nucleic acids

comprising the SNPs and probes and primers for detecting them may be used

in assays for the diagnosis of diseases associated with SNPs (such as

sickle cell anaemia, agamaglobulinemia, diabetes insipidus, Lesch-Nyhan

syndrome, muscular dystrophy, Miskott-Aldrich syndrome, Fabry's disease,

familial hypercholesterolemia, polycystic kidney disease, hereditary

spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary

hemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos

syndrome, osteogenesis imperfecta, and acute intermittent porphyria,

CC symptoms of, or susceptibility to, multifactorial diseases of which a

CC component is or may be genetic, such as autoimmune diseases, cancer

CC inflammation, cancer, diseases of the nervous system, and infection by

CC pathogenic microorganisms, autoimmune diseases including rheumatoid

CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-

CC independent), systemic lupus erythematosus and Graves disease, cancers

CC including cancers of the bladder, brain, breast, colon, oesophagus,

CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,

CC skin, stomach and uterus, longevity, appearance (e.g., baldness,

CC obesity), strength, speed, endurance, fertility, and susceptibility or

CC receptivity to particular drugs or therapeutic treatments), in forensic

CC nucleotide polymorphisms of the invention

Sequence 21 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;

Best Local Similarity 78.9%; Pred. No. 1.1e+03;

Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 767 TCAAGAGCCTCAACACGC 785

DB 21 TCAAGATGTTAAACACGC 3

RESULT 1691

ABK60808/c

ID ABK60808 standard; DNA; 21 BP.

ABK60808;

05-NOV-2002 (first entry)

Human polymorphism associated DNA sequence #445.

Aminopeptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;

tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;

KLK1; bradykinin receptor B2; BDKRB2; gene therapy;

angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;

polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

cardiovascular disease; angina pectoris; hypertension; heart failure;

myocardial infarction; ventricular hypertrophy; vascular disease;

aneurysm; embolism; thrombosis; coronary artery disease; angioedema;

arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;

autoimmune disease; inflammatory arthritis; cancer; wound;

viral infection; bacterial infection; fungal infection; COPD;

Chronic obstructive pulmonary disease; enterocolitis.

Homo sapiens.

WO200261131-A2.

08-AUG-2002.

03-DEC-2001; 2001WO-US047235.

04-DEC-2000; 2000US-0251015P.

23-JAN-2001; 2001US-0253678P.

02-MAR-2001; 2001US-0273037P.

(BRIM) BRISTOL-MYERS SQUIBB CO.

(TSUC/) TSUCHIHASHI Z.

(HUIL/) HUI L.

Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;

Swanson BN, Powell JR;

WPI; 2002-619265/66.

New isolated nucleic acid with at least one polymorphic position, useful

for detecting, diagnosing and treating disorders such as angioedema,

cancer, viral, bacterial or fungal infection, cardiovascular and

autoimmune diseases.

CC individual comprising obtaining a nucleic acid sample, determining the
CC nucleotide present in at least one polymorphic position, and comparing at
CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC and compositions are useful for detecting, diagnosing, treating,
CC preventing various disorders such as angioedema and diseases which
CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC disease, trachomas, and cardiovascular diseases like angina pectoris,
CC hypertension, heart failure, myocardial infarction, ventricular
CC artery disease, arteriosclerosis, aneurysm, embolism, thrombosis, coronary
CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC obstructive pulmonary disease (COPD) and enterocolitis (many other
CC diseases and disorders are listed in the specification). The
CC polynucleotides are also useful for chromosome identification. Antibodies
CC against the proteins may be utilised for immunophenotyping of cell lines
CC and biological samples. The present sequence is included in the sequence
CC listing but is not referred to anywhere else in the specification
SQ

Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e-03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0

Qy 915 ACTGTTCCGTCGTCGAG 931
|||||
Db 19 ACTGTTCCGTCGTCGAG 3

RESULT 1694
AAS99452
ID AAS99452 standard; DNA; 21 BP.
XX
XX AAS99452;
AC
XX
XX 12-MAR-2002 (first entry)
DT
XX
XX Anti-human AL1M monoclonal antibody, sequencing primer #2.
DE
XX
XX Human; antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
KW antiallergic; antifur; neuroprotective; antithyroid; vasotropic;
KW immunosuppressive; dermatological; antiinflammatory; hepatotropic;
KW activation inducible lymphocyte immunomodulatory molecule; AL1M;
KW monoclonal antibody; allergy; rheumatoid arthritis; diabetes mellitus;
KW multiple sclerosis; autoimmune thyroiditis; psoriasis; hepatitis;
KW allergic contact-type dermatitis; chronic inflammatory dermatosis;
KW systemic lupus erythematosus; autoimmune disorder; inflammation;
KW glister versus host reaction; immune rejection; intestinal immunity;
KW ulcerative colitis; pneumonia; nephritis; vasculitis; pancreatitis;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX W0200187981-A2.
XX
XX 22-NOV-2001.
PD
XX
XX 15-MAY-2001; 2001WO-JP004035.
PF
XX
XX 18-MAY-2000; 2000JP-00147116.
PR
XX
XX 30-MAR-2001; 2001JP-00099508.
XX
XX (N1SB) JAPAN TOBACCO INC.
PA
XX
XX Tsuji T, Tezuka K, Hori N;
PI
XX
XX WPI; 2002-075313/10.
DR
XX
XX New human monoclonal antibody that binds to activation inducible
PT lymphocyte immunomodulatory molecule, useful for treating rheumatoid
PT arthritis, multiple sclerosis and inflammatory diseases.

XX Example 10; Page 247; 300pp; English.

PS The invention relates to a novel human antibody (1), preferably a human
CC monoclonal antibody which binds to an activation inducible lymphocyte
CC immunomodulatory molecule (AIIIM). (1) is useful for modulating signal
CC transduction into a cell mediated by AIIIM, for modulating proliferation
CC of AIIIM-expressing cells, for inducing antibody-dependent cytotoxicity
CC AIIIM-expressing cells, and for inducing antibody-dependent cytotoxicity
CC against AIIIM-expressing cells and/or immune cytotoxicity or apoptosis of
CC AIIIM-expressing cells. (1) is useful for treating, preventing or
CC prophylaxis of delayed type allergy. (1) is useful for treating and
CC preventing various diseases associated with AIIIM-mediated costimulatory
CC transduction, and for inhibiting the onset and/or advancement of the
CC diseases. (1) is useful for suppressing, prevention and/or treatment of
CC rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis,
CC allergic contact-type dermatitis, chronic inflammatory dermatitis,
CC systemic lupus erythematosus, insulin-dependent diabetes mellitus,
CC psoriasis, autoimmune or allergic disorders, inflammation, graft versus
CC host reaction, graft versus host disease, immune rejection, disorders
CC caused by abnormal intestinal immunity, specifically inflammatory
CC intestinal disorders such as ulcerative colitis, pneumonia, hepatitis,
CC hepatitis, vasculitis, and pancreatitis. (1) induces no serious
CC immunorejection due to antigenicity to human, i.e., human anti-mouse
CC antigenicity (HAMA) in a host. AAS99444-AAS99477 represent anti-human
CC AIIIM monoclonal antibody coding sequences and PCR primers of the
CC invention

SQ Sequence 21 BP; 4 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 849 CCTGCACAGGACCTGA 865
1 CCTGCACAGGACCTGA 17

Db

RESULT 1695

AAD45724 standard; DNA; 21 BP.

AC AAD45724;

DT 27-DEC-2002 (first entry)

DE Mycobacterium sp. hsp70 operon promoter amplifying primer, Hsp701.

XX Immunogenic; infection; vaccine; mycobacterial disease; tuberculosis;
KW Crohn's disease; gene therapy; anti-inflammatory; antibacterial; hsp70;
KW heat shock protein 70; PCR; primer; ss.

OS Mycobacterium sp.

PN WO200267982-A2.

PD 06-SEP-2002.

PF 20-FEB-2002; 2002WO-US005038.

PR 20-FEB-2001; 2001US-0269801P.

PR 29-MAY-2001; 2001US-0294170P.

PA (SRDU-) SEQUELTA INC.

PA (YOUNG) YOUNG D B.

PA (STEW) STEWART G R.

PA (OGAO/) O'GAORA P C B.

PI Young DB, Stewart GR, O'gaora PCE;

WPI; 2002-698637/75.

PT Immunogenic composition of mycobacterial mutants with modified protein
PT production capabilities, useful for vaccinating and treating infectious
PT in particular mycobacterial diseases such as tuberculosis and Crohn's
PT disease.

PS Example 9; Page 29; 59pp; English.

XX The invention relates to an immunogenic composition of mycobacterial
CC mutants with modified protein production capabilities. The invention also
CC relates to methods for the treatment and prevention of infectious
CC diseases. The methods and compositions of the invention are useful for
CC vaccinating and treating infections in particular mycobacterial diseases
CC such as tuberculosis and Crohn's disease. The invention is also used in
CC gene therapy. The present sequence is a PCR primer used for amplifying
CC Mycobacterium sp. hsp70 (heat shock protein 70) operon promoter. This
CC sequence is used to illustrate the method of the invention

SQ Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1020 GGTCAAGCTGGCTGACT 1036
3 GGTCAAGCTGGCTGACT 19

Db

RESULT 1696

ABT06423/c standard; DNA; 21 BP.

AC ABT06423;

DT 07-NOV-2002 (first entry)

DE Cyclin 14-3-3 sigma gene PCR primer #7.

XX Human; methylated gene; methylation; breast cancer; marker; WT-1;

KW cell proliferative disorder; TWIST; HOXA5; NBS-1; RABbeta; cyclin D2;

KW retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;

KW 14.3.3 sigma; HIN-1; RAS5F1A; tumour suppressor gene; hypermethylation;

KW PCR; primer; ss.

OS Homo sapiens.

PN WO200259347-A2.

PD 01-AUG-2002.

PF 28-JAN-2002; 2002WO-US002455.

PR 26-JAN-2001; 2001US-00771357.

PA (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.

PA Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Packler MU;

WPI; 2002-599803/64.

PT Diagnosing and/or determining a predisposition to a cellular
PT proliferative disorder of breast tissue, in particular breast cancer, by
PT determining the state of methylation of one or more nucleic acids
PT isolated from the subject.

PS Claim 12; Page 44; 115pp; English.

XX The present invention relates to a method of diagnosing a cellular
CC proliferative disorder of breast tissue, which involves determining the
CC state of methylation of one or more nucleic acids isolated from the
CC subject, where the state of methylation of the nucleic acids as compared
CC with a state of methylation from a subject not having the cellular
CC proliferative disorder of breast tissue is indicative of a cellular

CC proliferative disorder of breast tissue in the subject. The nucleic acids
CC may be TWIST, HoxA5, NRS-1, retinoic acid receptor beta (RARbeta),
CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,
CC HIF-1 or RASGPA. The method is useful for diagnosing and/or determining
CC a predisposition to a cellular proliferative disorder, in particular
CC breast cancer including ductal carcinoma in situ, lobular carcinoma,
CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metastatic
CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and
CC papillary carcinoma in situ. The present sequence is a primer used in the
CC exemplification of the invention

SQ Sequence 21 BP; 3 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 843 TGAGTACCTGACAGG 859
DB 19 TGAGTACCGGAGAGG 3

RESULT 1697

ABS97470
ID ABS97470 standard; DNA; 21 BP.

AC ABS97470;

XX 23-DEC-2002 (first entry)

DE Human diazepam binding inhibitor (DBI) gene polymorphic sequence #14.

XX
XX Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
XX cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
XX adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;
XX aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
XX cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
XX epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
XX glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
XX HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
XX NADPH quinone oxidoreductase 2; NQO2; sulfoxyltransferase thermolabile; STM;
XX UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
XX UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;
XX multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
XX acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
XX altered drug metabolism; cardiovascular function; colorectal tumour;
XX central nervous system; pulmonary; immunological; SNP;
XX single nucleotide polymorphism.

XX Homo sapiens.

OS WO200257410-A2.

XX 25-JUL-2002.

XX 28-NOV-2001; 2001WO-US044838.

XX 28-NOV-2000; 2000US-00724389.

XX (DNAS-) DNA SCI LAB INC.

XX Guida M, Hall J;

XX WPI; 2002-698522/75.

PT Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.

XX Example 9, Page 115, 714pp; English.

CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT) [kallikrein 2] KLK2, nicotinamide-N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfoxyltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention

SQ Sequence 21 BP; 6 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 704 AGGAGTACGACTGGA 720
DB 5 AGGAGTACGACTGGA 21

RESULT 1698

ABK53783/C
ID ABK53783 standard; DNA; 21 BP.

XX ABK53783;

XX 05-JUN-2002 (first entry)

XX DMS:acceptor oxidoreductase, PCR primer #29.

XX

XX DMS:acceptor oxidoreductase; dimethyl sulphide; sulphoxide;
XX prochiral organic sulphide; sulphoxide enantiomer; primer;
XX chiral drug production; optically-active functional drug; ss.

XX Rhodovulum sulfidophilum.

OS WO200216570-A1.

XX 28-FEB-2002.

XX 21-AUG-2001; 2001WO-AU001033.

XX 21-AUG-2000; 2000AU-00009559.

PA (UYOU) UNIV QUEENSLAND.
XX
PI Mcdevitt CA, Mcewan AG;
XX
DR WPI; 2002-280922/32.
XX
XX New recombinant dimethyl sulfoxide:acceptor oxidoreductase or its subunits,
PT useful for oxidizing prochiral organic sulfoxides to form sulfoxide
PT enantiomers for chiral drug synthesis.
XX
XX Claim 15; Page 46; 66pp; English.
XX
XX The invention relates to a recombinant dimethyl sulphide (DMS):acceptor
CC oxidoreductase (I) or its subunit selected from recombinant alpha, beta,
CC delta and gamma subunits. (I) is useful for oxidizing prochiral organic
CC sulfoxides to form sulfoxide enantiomers for chiral drug synthesis. (I)
CC is expressed in a transformed bacterium. The enantiomer formed is useful
CC for producing a chiral drug (I) is useful for synthesis of optically-
CC active functional groups of drug. DNA encoding (I) is useful for
CC producing a strain of DMS:acceptor oxidoreductase-deficient Rhodovulum
CC sulfidophilum, which is useful in whole-cell reaction, where DMS:acceptor
CC oxidoreductase activity is unwanted. ABK53751-ABK53805 represent R.
CC sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
CC PCR primers of the invention
XX
SQ Sequence 21 BP; 0 A; 12 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 241 GGGCGAGTGACCTG 257
Db 21 GGGCGAGTGACCTG 5

RESULT 1699
ABK94356
ID ABK94356 standard; DNA; 21 BP.
XX
AC ABK94356;
XX
DT 27-AUG-2002 (first entry)
XX
DE Endothelin converting enzyme 1 (ECE-1) SNP detection primer #144.
XX
XX Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;
KW EDNR; signaling system; cardiovascular disease; coronary heart disease;
KW hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;
KW diabetes; familial hypercholesterolemia; forensic marker;
KW transgenic animal; solid support; cardiovascular regulator; SNP;
KW single nucleotide polymorphism; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO200224747-A2.
XX
PD 28-MAR-2002.
XX
PF 31-AUG-2001; 2001WO-EP010087.
XX
PR 19-SEP-2000; 2000EP-00120123.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S;
XX
DR WPI; 2002-435060/46.
XX
PT Novel polynucleotide of the endothelin/endothelin converting
PT enzyme/receptors of endothelin and endothelin converting enzyme signaling
PT system associated with cardiovascular disease, useful for treating the
PT disease.

XX
PS Claim 1; Page 67; 190pp; English.
XX
XX The invention describes a polynucleotide (I) of the endothelin
CC (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)
CC signaling system which is associated with a cardiovascular disease. (I),
CC the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)
CC or (II) is useful for producing cells capable of expressing a molecular
CC variant polypeptide which is associated with a cardiovascular disease.
CC (III), (II), the EDN, ECE or EDNR polypeptide, or a cell expressing a
CC molecular variant gene comprising (I) is useful for identifying and
CC obtaining a pro-drug or drug capable of modulating the activity of a
CC molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system
CC or its gene product, or for identifying and obtaining an inhibitor of the
CC activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE
CC signaling system or its gene product. The isolated proteins and
CC polynucleotides encoding them are useful for preparation of a
CC pharmaceutical composition for treating a cardiovascular disease such as
CC coronary heart disease, hypertension, atherosclerosis, or related to
CC abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial
CC hypercholesterolemia. The gene or a polynucleotide fragment of the
CC EDN/ECE/EDNR signaling system are useful as forensic markers, for
CC creating a transgenic animal and in creation of a solid support
CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or
CC host cells of the invention. This sequence represents a PCR primer used
CC to identify single nucleotide polymorphisms in DNA encoding
CC cardiovascular regulator proteins of the EDN/ECE/EDNR signaling pathway
XX
SQ Sequence 21 BP; 5 A; 7 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 361 GGGGAGAGTGACCGAGC 377
Db 5 GGGGAGAGTGACCGAGC 21

RESULT 1700
ABK94355/C
ID ABK94355 standard; DNA; 21 BP.
XX
AC ABK94355;
XX
DT 27-AUG-2002 (first entry)
XX
DE Endothelin converting enzyme 1 (ECE-1) SNP detection primer #143.
XX
XX Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;
KW EDNR; signaling system; cardiovascular disease; coronary heart disease;
KW hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;
KW diabetes; familial hypercholesterolemia; forensic marker;
KW transgenic animal; solid support; cardiovascular regulator; SNP;
KW single nucleotide polymorphism; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO200224747-A2.
XX
PD 28-MAR-2002.
XX
PF 31-AUG-2001; 2001WO-EP010087.
XX
PR 19-SEP-2000; 2000EP-00120123.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S;
XX
DR WPI; 2002-435060/46.
XX
PT Novel polynucleotide of the endothelin/endothelin converting
PT enzyme/receptors of the endothelin/endothelin converting


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PI  Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
DR  WPI; 2003-248086/24.
XX
PT  Determining an individual's risk for type 1 diabetes, comprises detecting
PT  the presence of an insulin dependent diabetes mellitus-associated
XX  interleukin 4 receptor allele in a nucleic acid sample of the individual.
XX
PS  Example 1; Page 32; 79pp; English.
XX
CC  The sequences given in ABQ80119-35 represent probes which were used to
CC  identify wild type and variant loci in the human interleukin 4 receptor
CC  (IL4R). These probe sequences were used in the method of the invention
CC  for determining an individual's risk for type 1 diabetes. The method
CC  comprises detecting the presence of an insulin dependent diabetes
CC  mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic
CC  acid sample of the individual, where the presence of the allele indicates
CC  the individual's risk for type 1 diabetes. The method identifies one or
CC  more single nucleotide polymorphism (SNP) within the IL4R gene listed in
CC  the specification. The method and the SNP's are useful for determining an
CC  individual's risk for type 1 diabetes. The IL4R SNPs are also useful for
CC  determining an individual's risk for any autoimmune disease or condition
CC  or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,
CC  multiple sclerosis, inflammatory bowel disease, systemic lupus
CC  erythematosus, psoriasis, scleroderma, Grave's disease, systemic
CC  sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's
CC  thyroiditis
XX
SQ  Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match      0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred.No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY  1175  TCTCTATGAGATGCC 1191
Db      2  TCTTCTGAGATGCC 18
      ||||| ||||| ||
RESULT 1702
ABQ80161
ID  ABQ80161 standard; DNA; 21 BP.
XX
AC  ABQ80161;
XX
DE  13-JUN-2003 (first entry)
XX
XX  Probe DBM0080P, identifies wild type IL4R SNP #8.
XX
XX  Human; interleukin 4 receptor; IL4R; type 1; diabetes; allele;
XX  insulin dependent diabetes mellitus; IDDM; myasthenia gravis;
XX  single nucleotide polymorphism; SNP; autoimmune disease;
XX  T helper type 1 mediated disease; rheumatoid arthritis; probe;
XX  multiple sclerosis; inflammatory bowel disease; systemic sclerosis;
XX  systemic lupus erythematosus; psoriasis; scleroderma; Grave's disease;
XX  Guillain-Barre syndrome; Hashimoto's thyroiditis; ss.
XX
XX  Homo sapiens.
XX
XX  NC_003010335-A2.
XX
XX  06-FEB-2003.
XX
XX  17-JUL-2002; 2002MO-EP007956.
XX
XX  20-JUL-2001; 2001US-0306912P.
XX
XX  (HOFF ) ROCHE DIAGNOSTICS GMBH.
XX  (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
XX  Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX  WPI; 2003-248086/24.
XX

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XX Determining an individual's risk for type 1 diabetes, comprises detecting
PT the presence of an insulin dependent diabetes mellitus-associated
PT interleukin 4 receptor allele in a nucleic acid sample of the individual.
XX Example 4; Page 36; 79pp; English.
PS
XX The sequences given in AB080153-69 represent probes which were used to
CC identify wild type and variant loci in the human interleukin 4 receptor
CC (IL4R). These probe sequences were used in the method of the invention
CC for determining an individual's risk for type 1 diabetes. The method
CC comprises detecting the presence of an insulin dependent diabetes
CC mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic
CC acid sample of the individual, where the presence of the allele indicates
CC the individual's risk for type 1 diabetes. The method identifies one or
CC more single nucleotide polymorphism (SNP) within the IL4R gene listed in
CC the specification. The method and the SNP's are useful for determining an
CC individual's risk for type 1 diabetes. The IL4R SNP's are also useful for
CC determining an individual's risk for any autoimmune disease or condition
CC or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,
CC multiple sclerosis, inflammatory bowel disease, systemic lupus
CC erythematosus, psoriasis, scleroderma, Grave's disease, systemic
CC sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's
CC thyroiditis
CC
XX Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1175 TCTTCTATGAGATGCC 1191
DB 2 TCTTCTGAGATGCC 18
XX
XX RESULT 1703
XX AAL53951
XX ID AAL53951 standard; DNA; 21 BP.
XX
XX AAL53951;
XX
XX 18-FEB-2003 (first entry)
XX
XX Human papillomavirus probe, SEQ ID NO 1.
XX
XX Detecting; point mutation; hybridising; target DNA; duplex; RNase H;
XX single nucleotide polymorphism; probe; ss.
XX
XX Human papillomavirus.
XX
XX US2002142308-A1.
XX
XX 03-OCT-2002.
XX
XX 30-MAR-2001; 2001US-00823634.
XX
XX 30-MAR-2001; 2001US-00823634.
XX
XX (DAT) / DATAGUPTA N.
XX (TSEN) / TSENG T.
XX
XX Datagupta N, Tseng T;
XX
XX WPI; 2003-102506/09.
XX
XX
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand
XX having mutation with test DNA strand to form duplex, contacting the
XX duplex with RNase H and determining the cleavage of test strand by RNase
XX H.
XX
XX Example 1; Page 12; 26pp; English.
XX

CC The invention relates to a novel method for detecting a point mutation in
CC a DNA strand. The novel method comprises hybridising a target DNA strand
CC containing or suspected of containing a point mutation with a test
CC nucleic acid strand complementary to the DNA strand to form a target DNA
CC strand/test nucleic acid strand duplex, contacting the duplex with an
CC RNase H, and determining whether the ribonucleotide residues within the
CC nucleotide sequence are cleaved by RNase H. The method is useful for
CC detecting a point mutation in a DNA strand, where the point mutation to
CC be detected is a single nucleotide polymorphism, preferably a
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian
CC or human genome. The method is useful to detect any nucleic acids from
CC any species of organisms such as *Acetobacter*, *Bacillus*, *Candida*,
CC *Enterococcus*, *Haemophilus*, *Mycobacterium* and *Streptococcus*, and viruses.
CC This polynucleotide sequence represents a probe relating to the mutation
CC detecting method of the invention
XX
XX Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1677 CCCCAGTACATCTTCC 1693
DB 4 CCGTACTACATCTTCC 20
XX
XX RESULT 1704
XX ADC51528/C
XX ID ADC51528 standard; DNA; 21 BP.
XX
XX ADC51528;
XX
XX 18-DEC-2003 (first entry)
XX
XX Potential matrix metalloproteinase-2 activation related primer seq id 13.
XX
XX vasotrophic; cytosolic; potential matrix metalloproteinase-2; proMMP-2;
XX membrane type matrix metalloproteinases; MT-MMP; neovascularisation;
XX cancer; human; claudin 1; ss; primer.
XX
XX Synthetic.
XX
XX JP2003000249-A.
XX
XX 07-JAN-2003.
XX
XX 10-MAY-2001; 2001JP-00140296.
XX
XX 10-MAY-2001; 2001JP-00140296.
XX
XX (FUJY) FUJI PHARM IND CO LTD.
XX (KANAKA) KANAZAWA DAIKAKUCHO.
XX
XX WPI; 2003-472918/45.
XX
XX Activation of potential matrix metalloproteinase-2 (proMMP-2) with claudins
XX via membrane type matrix metalloproteinases (MT-MMPs).
XX
XX Example 3; SEQ ID NO 31; 49pp; Japanese.
XX
XX The invention describes the activation of potential matrix
XX metalloproteinase-2 (proMMP-2) with claudins via membrane type matrix
XX metalloproteinases (MT-MMP). Activated proMMP-2 is useful for treatment of
XX neovascularisation and cancer. This sequence represents a potential
XX matrix metalloproteinase-2 activation associated primer. Note: This
XX sequence is given in the specification as seq id 13.
XX
XX Sequence 21 BP; 1 A; 6 C; 7 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX

AD74696
ID ADF74696 standard; DNA; 21 BP.
XX
AC ADF74696;
XX
DT 26-FEB-2004 (first entry)
XX
DE Rat nestin PCR primer (SeqID 22).
XX
KW primer; rat; ss; differentiation status; anti-gene strategy; decoy DNA;
KW cis-element specific; viral protection; apoptosis;
KW muscle differentiation; gene therapy; CNS disorder;
KW neurodegenerative disease; traumatic brain injury; neuroprotective;
KW septamer; PCR.
XX
OS Rattus sp.
XX
PN US2003170736-A1.
XX
PD 11-SEP-2003.
XX
PF 31-JAN-2002; 2002US-00059273.
XX
PR 31-JAN-2001; 2001US-0265113P.
XX
PI (AGOS/) AGOSTON D V.
XX
PI Agoston DV;
XX
DR WPI; 2003-863755/80.
XX
PT Altering the differentiation status of cells using a nucleic acid is
XX useful to differentiate neural progenitor cells from stem cells for use
XX in the treatment of diseases, particularly neurodegenerative disease.
XX
PS Example 7; SEQ ID NO 22; 36pp; English.
XX
CC This invention relates to a novel methods and compositions for altering
XX the differentiation status of cells, for example stem and progenitor
XX cells. Specifically, it refers to an anti-gene strategy for gene transfer
XX CC and transcriptional studies that comprises the transfection of a decoy
XX DNA molecule i.e. a cis-element specific dsDNA molecule that has been
XX designed to contain a binding site for a transcription factor of
XX interest. In particular, this binding site comprises a novel 7-mer
XX (TTTGCAT), identified as a septamer, which is present within the
XX regulatory regions of some neuronal and glial specific genes. As such,
XX the present invention describes highly specific functional studies, as
XX well as therapeutic agents for blocking viral protection, tumour growth,
XX apoptosis, muscle differentiation and modulating the neuronal response to
XX various stimuli. Furthermore, through using gene therapy, the
XX compositions of this invention can be useful to treat CNS disorders
XX particularly neurodegenerative diseases or traumatic brain injuries, and
XX accordingly are described as having neuroprotective activity. This
XX oligonucleotide sequence is a rat nestin PCR primer of the invention.
XX
SQ Sequence 21 BP; 2 A; 5 C; 6 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1719 GAGCCATGTTCACTGC 1735
DB 1 GAGCTTGTTCACCTGC 17

RESULT 1708
ADJ13098/c
ID ADJ13098 standard; DNA; 21 BP.
XX
AC ADJ13098;
XX
DT 20-MAY-2004 (first entry)
XX

XX
DE Human DNA probe used to immobilise CpG methylated DNA SeqID 225.
XX
KW probe; ss; chemical modification; methylation; array; CpG island;
KW tumour suppressor; p16; human; H69; H1618.
XX
OS Homo sapiens.
XX
PN US2003152950-A1.
XX
PD 14-AUG-2003.
XX
PF 27-JUN-2002; 2002US-00184085.
XX
PR 27-JUN-2001; 2001US-0301370P.
XX
PI (GARN/) GARNER H R.
XX (MINN/) MINNA J D.
XX (LUEBK/) LUEBKE K J.
XX (BALO/) BALOG R P.
XX
PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX
DR WPI; 2003-874843/81.
XX
PT Analysis of chemical modification of DNA involves obtaining sample of DNA
XX to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX
PS Example 1; SEQ ID NO 225; 210pp; English.
XX

XX
CC This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.
XX
SQ Sequence 21 BP; 6 A; 13 C; 0 G; 2 T; 0 U; 0 Other;
XX

Query Match 0.8%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGG 242
DB 21 GGAGAGAGTGTGTGTGG 5

RESULT 1709
ADM67942/c
ID ADM67942 standard; DNA; 21 BP.
XX
AC ADM67942;
XX
DT 03-JUN-2004 (first entry)
XX
DE Oligonucleotide STAR-4 - N+1 reverse ligation primer.
XX
KW nucleic acid amplification; antimitragrine; analgesic; l-nucleic acid;
KW CGRP antagonist; calcitonin gene-related peptide; amylin; pain;
KW drug design; primer; ss.
XX
OS Synthetic.
XX

PN WO2003093504-A1.
 XX 13-NOV-2003.
 PD
 XX
 XX 06-MAY-2003; 2003WO-EP004747.
 PF
 XX 06-MAY-2002; 2002DE-01020191.
 PR
 XX (NOXX-) NOXXON PHARMA AG.
 PA
 XX Vater A, Jarosch F, Wettich A, Klusmann S;
 PI
 XX WPI; 2003-854487/79.
 DR
 XX
 PT Amplification of nucleic acid using two adaptors, useful for selection
 PT and preparation of aptamers, potential therapeutic agents, with all steps
 PT done in one vessel.
 XX
 XX Example 17; Page 111; 262pp; German.
 PS
 CC This invention describes a novel method for amplifying nucleic acids. The
 CC method comprises 1) preparing a target to be amplified, preferably RNA,
 CC having defined 5' and 3' sequences, separated by an intermediate
 CC sequence, 2) preparing a first adapter (Ad1) of double-stranded nucleic
 CC acid (especially one strand of RNA and the other DNA), where the 5'-end
 CC of the DNA strand has an overhang at least partly complementary with the
 CC 5'-end of the target, 3) preparing a second adapter (Ad2) of double
 CC stranded nucleic acid, where the first strand has a 5'-phosphate residue
 CC on (deoxy)ribose and the second strand (DNA) has a 3'-end that is at
 CC least partly complementary with the 3'-end of the target, the second
 CC strand also has a cleavage site which can generate a cleavage product
 CC that includes the complementary 3'-end of the second strand, 4) the
 CC adapters are ligated on the target, 5) reverse transcription is performed
 CC and optionally the second strand is synthesised. The products of the
 CC invention have antimigraine and analgesic activity. The method is
 CC especially used for selection and preparation of nucleic acids including
 CC l-nucleic acids, that bind to selected targets (aptamers), potentially
 CC useful as therapeutic agents, e.g. as antagonists of CGRP (calcitonin
 CC gene-related peptide) or anylin or their receptors, suitable for
 CC treatment of pain, migraine and other conditions, also as starting points
 CC for rational drug design, in screening for therapeutic compounds and for
 CC target validation. The method can be done in a single vessel, without
 CC purification of process intermediates and it can be applied to short
 CC sequences.
 XX
 SQ Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 372 CCAGGCTTCAGCCACGT 388
 DB 21 CCAGGTTTCAGCCTCGT 5
 XX
 RESULT 1710
 ADM83644/C
 ID ADM83644 standard; DNA; 21 BP.
 XX
 AC ADM83644;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Cyclin 14-3-3 sigma PCR primer #5.
 XX
 KW cellular proliferative disorder; breast cancer; methylation;
 KW predilection; sequencing; primer; Cpg island; ss; cyclin 14-3-3 sigma;
 KW human.
 XX
 OS Homo sapiens.
 XX
 XX US2003138783-A1.
 PN

XX 24-JUL-2003.
 PD
 XX
 XX 28-JAN-2002; 2002US-00059579.
 PF
 XX
 XX 26-JAN-2001; 2001US-00771357.
 PR
 XX (SUKU/) SUKUMAR S.
 PA (EVRO/) EVRON E.
 PA (DOOL/) DOOLEY W C.
 PA (SACC/) SACCHI N.
 PA (DAVI/) DAVIDSON N.
 PA (PACK/) PACKLER M J.
 PI
 XX Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Packler MJ;
 PI WPI; 2003-851722/79.
 DR
 XX
 XX
 XX
 PT Diagnosing a cellular proliferative disorder of breast tissue in a
 PT subject comprises determining the state of methylation of one or more
 XX nucleic acid isolated from the subject.
 XX
 PS Claim 12; SEQ ID NO 31; 59pp; English.
 XX
 CC The invention describes a method of diagnosing a cellular proliferative
 CC disorder of breast tissue in a subject comprising determining the state
 CC of methylation of one or more nucleic acid isolated from the subject,
 CC where the state of methylation of one or more nucleic acids is compared
 CC with the state of methylation of one or more nucleic acids from a subject
 CC not having the cellular proliferative disorder of breast tissue. Also
 CC described are: a method for determining a predisposition to a cellular
 CC proliferative disorder of breast tissue in a subject; a method of
 CC diagnosing a cellular proliferative disorder of breast tissue in a
 CC subject; and a kit for the detecting a cellular proliferative disorder of
 CC breast tissue in a subject. The method is useful for diagnosing a
 CC cellular proliferative disorder of breast tissue in a subject. This
 CC sequence represents a primer used to sequence the cyclin 14-3-3 sigma
 CC gene during mutational analysis to examine the extent of methylation of
 CC the cyclin 14-3-3 sigma Cpg islands in normal mammary epithelium, breast
 CC cancer cell lines and in primary mammary tumours.
 XX
 SQ Sequence 21 BP; 3 A; 10 C; 3 G; 5 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 843 TGAGTACTTGACAAGG 859
 DB 19 TGAGTACCGGAGAGAAG 3
 XX
 RESULT 1711
 AD134812
 ID AD134812 standard; DNA; 21 BP.
 XX
 AC AD134812;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Forward primer for generating probe for S. cerevisiae gene YMR083w-ADH3.
 XX
 KW Hybridization; health care; environmental research;
 KW pharmaceutical industry; food industry; PCR; primer; YAL054c-ACS1;
 KW YCR050c-CIT2; YMR083w-ADH3; YBL015w-ACH1; YFL039c-ACT1; ss.
 XX
 OS Saccharomyces cerevisiae.
 OS Synthetic.
 XX
 XX WO2004005545-A1.
 XX
 XX 15-JAN-2004.
 PD
 XX

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PF 04-JUL-2003; 2003WO-FI000544.
XX
XX 05-JUL-2002; 2002FI-00001325.
XX
XX (VALM ) VALTION TEKILLINEN TUTKIMUSKESKUS.
XX
XX Soederlund H, Satokari R, Kataja K, Takkinen K;
XX
XX WPI; 2004-142984/14.
XX
XX Determining amounts or relative proportions of individual polynucleotide
XX or subgroups in polynucleotide mixture using mixture of polynucleotide
XX probe having approximately same length, useful in health care, food
XX industry.
XX
XX Example 6; SEQ ID NO 9; 82pp; English.
XX
XX The invention relates to determining (M1) amounts or relative proportions
XX of polynucleotide sequence or subgroups of it in polynucleotide mixture,
XX by allowing hybridization reaction to take place between surplus of
XX soluble polynucleotide probes having approximately same number of
XX hybridizing nucleotides and resolution enabling tags, recovering of
XX quantitatively hybrids, recording amount or relative proportions of
XX distinguishable polynucleotide probes. (M1) is useful for determining
XX amounts or relative proportions of polynucleotide sequence or subgroups
XX of it in polynucleotide mixture. (M1) is useful for determining
XX variations in the amount of more than one polynucleotide sequence in a
XX mixture with using (M1) for assessing hygienic conditions and
XX epidemiologic situations, effects of external stimuli or treatment
XX modalities microbial population. (M1) is useful in health care,
XX environmental research, pharmaceutical industry and food industry, and
XX are applicable for many other diagnostic, biotechnical and scientific
XX purposes. (M1) provides demonstration of differences in the expression of
XX non-homologous, allelic genes in a chromosome and may explain the reasons
XX for different manifestation of certain diseases. (M1) allows simultaneous
XX determination of amounts or relative proportions of more than one
XX individual target polynucleotide sequence present in polynucleotide
XX mixture. (M1) is made very sensitive and allow quantitative detection of
XX polynucleotide sequences present in diminutive amounts. Sequences
XX AD134808-AD134817 represent PCR primers used for generating probes
XX specific for the various S. cerevisiae genes YAL054c-ACS1, YCR05c-CIT2,
XX YMR083w-ADH3, YBL015w-ACH1, YFL039c-ACT1.
XX
XX Sequence 21 BP; 6 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1529 AGCTACAAAAGGAGGCC 1545
Db 2 AGCTACCAAGGTGGCC 18

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XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 3396; 2627pp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human
XX gene and is useful for detecting a single nucleotide polymorphism in a
XX human gene or for diagnosing of disease. The invention enables the
XX detection of a single nucleotide polymorphism in a human gene. The
XX present sequence represents a primer of the invention.
XX
XX Sequence 21 BP; 1 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1554 GCTTCGTGATGCTG 1570
Db 5 GCTTCCTGATGCTG 21

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RESULT 1713
ADMT4772
ID ADMT4772 standard; DNA; 21 BP.
XX
XX ADMT4772;
XX
XX 03-JUN-2004 (first entry)
XX
XX Zg-lectin protein related primer, JLR3.
XX
XX Zg-lectin; primer; ss.
XX
XX Unidentified.
XX
XX CN1459503-A.
XX
XX 03-DEC-2003.
XX
XX 23-MAY-2002; 2002CN-00111817.
XX
XX 23-MAY-2002; 2002CN-00111817.
XX
XX (UYFU-) UNIV FUDAN.
XX
XX Tang K, Kai G, Sun X;
XX
XX WPI; 2004-157678/16.
XX
XX Julian agglutinin protein and its code sequence.
XX
XX Example 1; Page 9; 19pp; Chinese.
XX
XX The invention relates to a novel Zg-lectin protein. The invention further
XX relates to the Zg-lectin protein coding sequence, the preparing process
XX of the said protein and its nucleic acid sequence, and a method for
XX detecting its nucleic acid sequence and polypeptide from a specimen. This
XX polynucleotide sequence represents a primer used in the exemplification
XX of the invention.
XX
XX Sequence 21 BP; 7 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;

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RESULT 1718
AAL41783
ID AAL41783 standard; DNA; 15 BP.
XX
AC AAL41783;
XX
DT 25-APR-2002 (first entry)
XX
DE Human MC2R gene ASO primer SEQ ID NO: 32.
XX
KM Human; melanocortin 2 receptor (adrenocorticotrophic hormone); MC2R;
KW primer; haplotype; familial glucocorticoid deficiency; FGD; cancer;
XX chromosome 18q11.2; SNP; single nucleotide polymorphism; ss.
OS Homo sapiens.
XX
PM WO200202821-A1.
XX
PD 10-JAN-2002.
XX
PF 29-JUN-2001; 2001WO-US021064.
XX
PR 30-JUN-2000; 2000US-0215330P.
XX
PA (GENA-) GENA155ANCE PHARM INC.
XX
PI Kazemi A, Koshiy B, Lee HH, Sausker EA;
XX WPI; 2002-171650/22.
DR
XX
XX Melanocortin 2 receptor (MC2R) gene polymorphic variants, useful e.g. in
PT studying the expression and function of MC2R and screening candidate
PT drugs for treating familial glucocorticoid deficiency and cancer.
XX
XX Claim 16; Page 14; 79pp; English.
XX
CC The present invention provides the gene, protein and cDNA sequences of
CC the human melanocortin 2 receptor (adrenocorticotrophic hormone) (MC2R).
CC Also identified are a number of single nucleotide polymorphisms (SNPs)
CC found within the sequences. The sequences can be used to find the
CC haplotype of the MC2R gene in an individual and to identify drugs for the
CC treatment of cancer and familial glucocorticoid deficiency. The present
CC sequence is an allele specific primer for the gene of the invention.
CC which is found on chromosome 18q11.2
XX
SQ Sequence 15 BP; 2 A; 4 C; 5 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 8.7e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 292 CGTTCGACGGGG 305
Db 1 CGTTCGACGGGK 14
XX
RESULT 1719
AAQ06909
ID AAQ06909 standard; DNA; 20 BP.
XX
AC AAQ06909;
XX
DT 09-JAN-2003 (revised)
DT 05-MAR-1991 (first entry)
XX
DE MY4B nucleotide constituent of gag gene of HIV-1 Bru, -Mal or -Eli, HIV-
DE 2 ROD and SIV-MAC.
XX
KM HIV-1; HIV-2; SIV; AIDS; anti-sense nucleotide; ss.
XX
OS Human immunodeficiency virus.
OS Simian immunodeficiency virus.
XX
```

```
PN EP403333-A.
XX
PD 19-DEC-1990.
XX
XX
PF 05-JUN-1990; 90EP-00401520.
XX
PR 20-SEP-1989; 89PR-00012371.
XX
PA (INSP ) INST PASTEUR.
PA (INRM ) INSERM INST NAT SANTE RE.
XX
PI Moncany M, Montagnier L;
XX WPI; 1990-378039/51.
DR
XX
XX New nucleotide sequences derived from genome of HIV-1, HIV-2 and SIV -
PT useful as primers for amplification of immuno-deficiency viruses in
PT diagnosis and for raising antibodies in treatment of HIV infections.
XX
XX Claim 2; Page 18; 24pp; French.
XX
CC This nucleotide sequence is found in posn. 1388-1369 of HIV-1 Bru, 1421-
CC 1403 of HIV-1 Mal, 1388-1369 of HIV-Eli, 1706-1687 of HIV-2 ROD and 1670-
CC 1651 of SIV-MAC. It is the anti-sense strand of a primer pair used to
CC amplify these HIV-1, HIV-2 and SIV viral sequences, esp. in conjunction
CC with in vitro diagnosis of infection. It is useful for treating viral
CC diseases, eg. AIDS. See also AAQ06905-08 and AAQ06910-54. (Updated on 09-
CC JAN-2003 to add missing OS field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 3 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 72.2%; Pred. No. 1.1e+03;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1703 CTGTGCTACTGCTGCTGA 1720
Db 1 CTGTGCAATRGCTGCTGTA 18
XX
RESULT 1720
AAQ13687
ID AAQ13687 standard; DNA; 20 BP.
XX
AC AAQ13687;
XX
DT 25-MAR-2003 (revised)
DT 26-NOV-1991 (first entry)
XX
DE N-ras gene codon 12 nucleotide variation detection step primer.
XX
KW ss.
XX
OS Synthetic.
XX
PM WO9113075-A.
XX
PD 05-SEP-1991.
XX
PF 16-FEB-1990; 90US-00482005.
XX
PR 16-FEB-1990; 90US-00482005.
XX
PA (ORIN ) ORION YHTMAE OY.
XX
PI Soderlund H, Syvanen AC;
XX WPI; 1991-281407/38.
DR
XX
XX Detection of specific nucleotide variations - by primer extension using a
PT detection step primer immediately adjacent the variable nucleotide.
XX
PS Claim 29; Page 61; 67pp; English.
```

```
XX CC The sequence is that of a detection step primer for use in the
CC identification of a mutation (G -> A) in the second nucleotide of codon
CC 12 of the N-ras gene. It corresponds to nucleotides 15 to 34 on the N-ras
CC gene and was synthesised on an Applied Biosystems 381A DNA synthesiser.
CC It allows the accurate determ. of changes in the N-ras gene with such
CC efficiency and ease that large numbers of samples can be screened. See
CC also AAQ1677-Q1689. (Updated on 25-MAR-2003 to correct PA field.)
XX CC
SQ Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 229 AGTGTGTGTGTGTGCGCAG 248
Db 1 ACTGTGTGTGTGTGAGCAG 20

RESULT 1721
AAQ22643/C
ID AAQ22643 strand; DNA; 20 BP.
XX AC AAQ22643;
XX XX
XX 08-JUL-1992 (first entry)
XX DE Antisense oligonucleotide #15 targeted to ICAM-1 3'-UTR (1952-1971).
XX XX Interleukin adhesion molecule-1; inhibitor; phosphorothioate bond;
XX KW triple helix; 3' untranslated region; ss.
XX PS Synthetic.
XX OS
XX MO9203139-A.
XX PD 05-MAR-1992.
XX PF 23-JUL-1991; 91MO-US005209.
XX PR 14-NOV-1990; 90US-00567286.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Mirabella CK, Mira;
XX DR WPI; 1992-096579/12.
XX XX
XX New oligonucleotides hybridisable to cell adhesion modulators - for
XX treatment and diagnosis of e.g. allograft rejection, cancer, AIDS etc.
XX PT and diagnosis of intercellular adhesion dysfunction.
XX PS Example 5; Page 43; 75pp; English.
XX CC This antisense oligonucleotide was designed to hybridise to the 3'-UTR of
XX human ICAM-1 mRNA. It was synthesised in the phosphorothioate form as
XX none of the phosphodiester form-antisense oligonucleotides which were
XX initially tested demonstrated inhibitory activity. Oligonucleotide #15
XX was found to be the most active of 16 potentially inhibitory anti-sense
XX sequences. Its anti-sense activity was not shared by other
XX oligonucleotides which hybridise to 3'-untranslated sequences. See e.g.
XX AAQ22644
XX CC
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGCGCG 245
Db 20 GAGAGGGGAACTGTGTGCGG 1
```

```
RESULT 1722
AAQ6488/C
ID AAQ6488 strand; DNA; 20 BP.
XX AC AAQ6488;
XX XX
XX 28-FEB-1995 (first entry)
XX DE K-ras codon 12 WTP-PCR set 1 primer #1.
XX XX Polymerase chain reaction; primer; PCR; amplify; oncogene; K-ras; mutant;
XX KW detection; sputum; ss.
XX PS Synthetic.
XX OS
XX JP06167492-A.
XX PN 14-JUN-1994.
XX PD 30-NOV-1992; 92JP-00345280.
XX PR 30-NOV-1992; 92JP-00345280.
XX PA (SAKA ) OTSUKA PHARM CO LTD.
XX XX
XX WPI; 1994-230933/28.
XX DE Detection of variant oncogene by PCR amplification - using the mutation
XX PT site as the complementary base to the 3' end of a PCR primer.
XX PS Disclosure; Fig 1; 6pp; Japanese.
XX OS
XX The sequences given in AAQ6488-90 are primers which were used in the
XX method of the invention for the detection of a mutant oncogene. The
XX method allows the detection and measuring a mutant oncogene contained in
XX a sputum sample. PCR is performed by utilising the mutation position of
XX the objective mutant oncogene as the complementary base to the 3'
XX terminal at base of the PCR primer, and by using a mixture of three
XX primers which are different from the normal sequence at the 3'
XX terminus. Another primer is used to hold the mutant oncogene together so
XX that the mutant oncogene can be amplified position specifically and
XX detected. The oncogene is pref. the K-ras gene and the mutation to be
XX detected is pref. either codon 12, 13 or 61. This method allows detection
XX of a mutation which is present only in trace amounts in the test sample
XX CC
SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1311 GACATCAACTACCCCAAGT 1330
Db 20 GAGCTCCACTACCAAGT 1

RESULT 1723
AAQ44522/C
ID AAQ44522 strand; DNA; 20 BP.
XX AC AAQ44522;
XX XX
XX 25-MAR-2003 (revised)
XX DT 26-SEP-1994 (first entry)
XX DE Antisense oligonucleotide which targets human ICAM-1 3'-UTR.
XX XX Human intercellular adhesion molecule; ICAM-1; cell adhesion; modulation;
XX KW inflammation; psoriasis; malignant melanoma; inflammatory bowel disease;
XX antisense oligonucleotide; therapy; ss.
XX XX
```


Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 849 CCTGACAAAGACCTGAAC 868
 |||||
 DB 20 CCTGACGAGAACTTCAAGC 1

RESULT 1726
 AAQ71501/C
 ID AAQ71501 standard; cDNA; 20 BP.
 XX
 AC AAQ71501;
 XX
 DT 25-MAR-2003 (revised)
 DT 02-MAY-1995 (first entry)
 XX
 DE Probe for identifying Brucella species.
 XX
 KW omp2; consensus; Brucella; identification; diagnosis; infection; biovar;
 KW cattle; disease; ss.
 XX
 OS Synthetic.
 OS
 PN US5348857-A.
 PD 20-SEP-1994.
 PF 06-NOV-1992; 92US-00972791.
 PR 22-MAY-1990; 90US-00527017.
 XX
 PA (TEXA) UNIV TEXAS A & M.
 XX
 PI Ficht TA, Adams LG;
 XX
 DR WPI; 1994-302203/37.
 XX
 PT Identification of Brucella species or biovars - by amplification of the
 PT Brucella omp2 gene locus and hybridisation with DNA probes.
 XX
 PS Disclosure; Col 41; 50pp; English.
 XX
 CC Rapid detection of Brucella may be achieved by amplifying the omp2 gene
 CC locus of Brucella (which shows genetic variation correlating with
 CC established species designations) and hybridising the amplified sequence
 CC with a panel of DNA probes to identify a species of biovar of Brucella.
 CC The amplified sequence is preferably a sequence between nucleotides 2470
 CC and 3346 of the consensus sequence described in AAQ71479. The method is
 CC used for the detection of Brucella infection in animals, particularly
 CC humans and cattle. This probe specifically hybridises to sequences from
 CC Brucella abortus biovar 1, Brucella abortus biovar 5, Brucella
 CC melitensis, Brucella neotomae and Brucella ovis which are amplified by
 CC the primers described in AAQ71496 and AAQ71497. The use of an array of
 CC probes (See AAQ71498-509) allows specific identification of the species
 CC of Brucella. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 177 CCGAGCGATGACAGACCA 196
 |||||
 DB 20 CCGAGTCATAGGCAACACA 1

RESULT 1727
 AAQ91248
 ID AAQ91248 standard; DNA; 20 BP.
 XX
 AC AAQ91248;
 XX

DT 10-JUL-1996 (first entry)
 XX
 DE EAA5 receptor PCR primer 7-6.
 XX
 KW Glutamate receptor; EAA5 receptor; excitatory amino acid; CNS receptor;
 KW RNA editing; polymerase chain reaction; PCR; primer; ss.
 XX
 OS Synthetic.
 OS
 PN WO9517508-A2.
 PD 29-JUN-1995.
 PF 21-DEC-1994; 94WO-CA000705.
 PR 23-DEC-1993; 93US-00172188.
 XX
 PA (ALIX) ALLELIX BIOPHARMACEUTICALS INC.
 XX
 PI Kamboj R, Nutt S;
 XX
 DR WPI; 1995-240670/31.
 XX
 PT Identification of human CNS receptor ligand - and identification of
 PT agents that modulate editing of human CNS receptors.
 XX
 PS Example 9; Page 35; 59pp; English.
 XX
 CC PCR primers (AAQ91246-50) were used to amplify human glutamate receptor
 CC EAA5 genomic DNA and cDNA. Examination of the PCR products showed that
 CC the cDNA sequence differed from the genomic sequence at 2 places in the
 CC transmembrane domain-coding region, resulting in S310A and R532Q
 CC substitutions. These variations were attributed to RNA editing involving
 CC T to G and G and A substitutions. Similar RNA editing was found for EAA3
 CC (see also AAQ91231) and EAA4 (see also AAQ91232) genes
 XX
 SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1211 CCGGCTCCACGGTGGAGAA 1230
 |||||
 DB 1 CTGGCTCCGAGGTGTGGAA 20

RESULT 1728
 AAT01753/C
 ID AAT01753 standard; DNA; 20 BP.
 XX
 AC AAT01753;
 XX
 DT 18-DEC-1995 (first entry)
 XX
 DE Peptide Nucleic acid oligomer targeting ICAM-1 3'-UTR.
 XX
 KW peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1;
 KW endothelial leukocyte; ELAM-1; vascular; VCAM-1; antiinflammatory;
 KW anticancer; antimeastatic; anti-AIDS; anti-rhinoviral; ss.
 XX
 OS Synthetic.
 OS
 FH Key Location/Qualifiers
 FT misc_feature 1..20
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 XX WO9504749-A1.
 XX

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PD 16-FEB-1995.
XX
XX 05-AUG-1994; 94WO-US009026.
XX
PR 05-AUG-1993; 93US-00102650.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Mirabelli CK;
XX
DR WPI; 1995-090842/12.
XX
PT New peptide nucleic acid oligomers hybridising to adhesion molecule genes
PT - are stable anti-sense cpds. of high affinity, partic. for treating
PT inflammation, viral infection, cancer etc.
XX
XX
PS Claim 2; Page 35; 57pp; English.
XX
CC New oligomers are claimed which (A) have at least one peptide nucleic
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region,
CC coding region, 5'-untranslated region or 3'-untranslated region of ICAM-1
CC or ELAM-1, or hybridisable to AUG region, coding region, 5'- untranslated
CC region, exon/intron junction region or 3'-untranslated region of VCAM-1.
CC The PNAs can be used to target RNA and single stranded DNA (ssDNA) to
CC produce antisense-type gene regulation moieties. Hence they may be used
CC therapeutically for modulating cellular adhesion and thus as
CC anti-neoplastic agents, anticancer agents, antiviral agents, anti-
CC AIDS agents and antiinflammatory agents. They may also be useful as
CC diagnostics, e.g. as probes for specific mRNAs. PNA oligomers have high
CC affinity for complementary single stranded DNA. They are also able to
CC form triple helices in which a first PNA strand binds with RNA or ssDNA
CC and a second PNA strand binds with the resulting double helix or with the
CC first PNA strand. The PNAs possess no significant charge and are water
CC soluble, which facilitates cellular uptake. Further, since they contain
CC amides of non-biological amino acids, they are biostable and resistant to
CC enzymatic degradation by proteases. The present sequence targets human
CC intercellular adhesion molecule-1 (ICAM-1) 3' untranslated region
CC
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGCGG 245
DB 20 GAGAGGCGAAGTGTGCGGG 1

RESULT 1729
AAQ9937/c
ID AAQ9937 standard; cDNA; 20 BP.
XX
AC AAQ9937;
XX
DT 07-MAY-1996 (first entry)
XX
DE P16-specific mouse MTS1E1-beta cDNA reverse primer.
XX
KW Multiple tumour suppressor; R1-alpha; diagnosis; cancer; leukaemia;
KW astrocytoma; glioblastoma; Hodgkin's lymphoma; melanoma; glioma;
KW gene therapy; chronic; ss.
XX
OS Mus SP.
XX
XX WO9525429-A1.
XX
XX PD 28-SEP-1995.
XX
XX PF 17-MAR-1995; 95WO-US003316.
XX
XX PR 18-MAR-1994; 94US-00214581.
XX
XX PR 18-MAR-1994; 94US-00214582.

```

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PR 18-MAR-1994; 94US-00215088.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Kamb A;
XX
XX WPI; 1995-344401/44.
XX
XX
XX Wild-type multiple tumour suppressor (MTS) gene and mutant sequences -
XX PT useful in diagnosis, prognosis and therapy of human cancer, e.g. melanoma
XX PT or Leukaemia.
XX
XX PS Example 12; Page 71; 156pp; English.
XX
CC The cDNA sequences encoding several multiple tumour suppressor (MTS)
CC polypeptides have been isolated and sequenced, using various sequencing
CC and amplification primers. AAQ9936-40 are oligonucleotides used to
CC amplify cDNA encoding mouse MTS1E1-beta to allow comparison of the human
CC and murine sequences. MTS polypeptide-encoding cDNAs and mutants of these
CC are useful for the diagnosis or prognosis of human cancer. Germ-line
CC mutations of MTS cDNAs can be used for diagnosing predisposition to
CC melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma,
CC Hodgkin's lymphoma, CLL and cancers of the pancreas, thyroid, ovary,
CC uterus, testis, kidney, stomach and rectum. The wild-type gene is useful
CC for gene therapy and MTS polypeptides may also be used for protein
CC replacement therapy. Also the polypeptides or cells contg. an altered MTS
CC gene are useful for screening for potential cancer therapeutics
XX
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGCTACTCTGAGAACT 524
DB 20 GAGGCTTCTTGACACGCT 1

RESULT 1730
AAQ81115/c
ID AAQ81115 standard; DNA; 20 BP.
XX
AC AAQ81115;
XX
XX
XX 25-MAR-2003 (revised)
XX
XX DT 28-SEP-1995 (first entry)
XX
XX
XX Peptide nucleic acid.
XX
XX KW Peptide nucleic acid; gene therapy; transcription arrest; diagnosis;
XX KW prophylaxis; ss.
XX
XX OS Synthetic.
XX
XX FH Key
XX FT modified_base 20
XX FT /*tag= a
XX FT /note= "covalently bound Lys-NH2 group"
XX
XX WO9501370-A1.
XX
XX
XX PD 12-JAN-1995.
XX
XX PF 28-JUN-1994; 94WO-US007319.
XX
XX PR 02-JUL-1993; 93US-00086658.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX Buchardt O, Egholm M, Nielsen PE, Berg RH, Ecker DJ;

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PI Mollegaard NE;
XX
XX WPI; 1995-060949/08.
DR
XX Use of oligonucleotide analogues, partic. peptide nucleic acids - for
PT binding to ssDNA, dsDNA or RNA for use in therapy, diagnosis and
PT prophylaxis.
XX
XX Example 1; Page 28; 139pp; English.
XX
XX AAQ8115 is a peptide nucleic acid (PNA), which binds a target sequence.
CC The binding of the PNA prevents the transcription of the target sequence
CC by RNA polymerase. The ability of the PNA to arrest transcription makes
CC it useful in gene therapy, and in diagnostic and prophylactic methods.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGCGG 245
Db 20 GAGAGGGGGAAGTGTGTGCGG 1

RESULT 1731
AAQ8119/c
ID AAQ8119 standard; DNA; 20 BP.
XX
XX AAQ8119;
AC
XX
XX 25-MAR-2003 (revised)
DT 28-SEP-1995 (first entry)
XX
XX Peptide nucleic acid.
DE
XX Peptide nucleic acid; gene therapy; transcription arrest; diagnosis;
KW prophylaxis; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 20
FT /*tag= a
FT /note= "amidated"
FT
XX
XX MO9501370-A1.
XX
XX 12-JAN-1995.
XX
XX 28-JUN-1994; 94WO-US007319.
XX
XX 02-JUL-1993; 93US-00088658.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Buchardt O, Egholm M, Nielsen PE, Berg RH, Ecker DJ;
PI Mollegaard NE;
XX
XX WPI; 1995-060949/08.
XX
XX Use of oligonucleotide analogues, partic. peptide nucleic acids - for
PT binding to ssDNA, dsDNA or RNA for use in therapy, diagnosis and
PT prophylaxis.
XX
XX Example 1; Page 28; 139pp; English.
XX
XX AAQ8119 is a peptide nucleic acid (PNA), which binds a target sequence.
CC The binding of the PNA prevents the transcription of the target sequence
CC by RNA polymerase. The ability of the PNA to arrest transcription makes
CC it useful in gene therapy, and in diagnostic and prophylactic methods.

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CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGCGG 245
Db 20 GAGAGGGGGAAGTGTGTGCGG 1

RESULT 1732
AAQ80945/c
ID AAQ80945 standard; DNA; 20 BP.
XX
XX AAQ80945;
AC
XX
XX 25-MAR-2003 (revised)
DT 24-AUG-1995 (first entry)
XX
XX PCR primer to generate a random probe for screening complex genome.
DE
XX sequence sampled mapping; genomic analysis; complex genome mapping;
KW cosmid library; Giardia lamblia; ss.
XX
XX Synthetic.
OS
XX
XX WO9429486-A1.
XX
XX 22-DEC-1994.
XX
XX 15-JUN-1994; 94WO-US006810.
XX
XX 15-JUN-1993; 93US-00078471.
XX
XX 07-SEP-1993; 93US-00117952.
XX
XX (SALK ) SALK INST BIOLOGICAL STUDIES.
XX
XX Evans GA, Smith MW;
PI
XX
XX WPI; 1995-036508/05.
XX
XX Sequencing complex genomes, present as fragments in a cosmid library - by
PT sequencing end-specific nucleotides of each clone then correlating with
PT spatial relationship of cosmid, esp. for mammalian chromosomes.
XX
XX Example 3; Page 43; 128pp; English.
XX
XX A probe of approximately 1 kb recognising beta-giardin genomic DNA was
CC generated by PCR with the oligonucleotides AAQ80942 and AAQ80943. A
CC random probe was generated as a 1.5 kb product with the primers AAQ80944
CC and AAQ80945. The probes were used in the identification of cosmids from
CC the beta-giardin genomic region in a Giardia lamblia 20-genome equivalent
CC cosmid library. This was part of a novel method for sequence-sampled
CC mapping of complex genomes. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 5 A; 11 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 230 GTGGTGTGTGTGTGCGGCGAGT 249
Db 20 GAGGTGTGTGTGTGAGAGT 1

RESULT 1733
AAQ00729/c
ID AAQ00729 standard; DNA; 20 BP.
XX

```

AC AAT00729;
 XX
 DT 08-MAY-1996 (first entry)
 XX
 DE Multiple tumour suppressor 1 gene p16 specific reverse PCR primer.
 XX
 KW Multiple tumour suppressor; MTS1; cancer; diagnosis; assay;
 KW predilection; melanoma; leukaemia; lymphoma; prognosis; pancreas;
 KW breast; thyroid; p16 specific; reverse PCR primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO9525813-A1.
 XX
 PD 28-SEP-1995.
 XX
 PF 17-MAR-1995; 95WO-US003537.
 XX
 PR 18-MAR-1994; 94US-00214582.
 PR 18-MAR-1994; 94US-00215086.
 PR 14-APR-1994; 94US-002215087.
 PR 01-JUN-1994; 94US-00221369.
 XX
 PA (UTAH) UNIV UTAH RES FOUND.
 PA (MYRI) MYRIAD GENETICS INC.
 XX
 PI Skolnick MF, Cannon-Albright LA, Kamb A;
 DR WPI, 1995-344626/44.
 XX
 PT Detecting polymorphism associated with cancer predilection - also DNA,
 PT vectors and host cells e.g. for gene or protein replacement therapy and
 PT drug screening.
 XX
 PS Example 12; Page 71; 148pp; English.
 XX
 CC An individual can be diagnosed as having a predisposition to cancer by
 CC detecting an alteration in the wild type multiple tumour suppressor (MTS)
 CC gene, using gene probes which hybridise to the MTS1 gene (amplified using
 CC the PCR primers AAT00729-31). The above assay can also be used in the
 CC diagnosis and prognosis of melanoma, lymphoma, leukaemia and pancreas,
 CC breast and thyroid cancers, etc
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 XX
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 Db 505 GAGGGCTACCTGGAGAACT 524
 20 GAAGGCTTCTCGACACGCT 1
 XX
 RESULT 1734
 ID AAQ88741/c
 XX AAQ88741 standard; DNA, 20 BP.
 AC AAQ88741;
 XX
 DT 27-FEB-1996 (first entry)
 XX
 DE Human ICAM modified antisense oligonucleotide.
 XX
 KW antisense; analogue; non-terminal pyrimidine; phosphorothioate; backbone;
 KW treatment; HIV; human immunodeficiency virus; HSV; herpes simplex virus;
 KW cancer; integrin; cell adhesion receptor; infection; diagnosis;
 KW nuclease resistance; ss.
 XX
 OS Homo sapiens.
 OS
 XX BP653439-A2.
 PN

XX
 PD 17-MAY-1995.
 XX
 PF 07-NOV-1994; 94EP-00117513.
 XX
 PR 12-NOV-1993; 93DE-0438704.
 XX
 PA (FARH) HOECHST AG.
 XX
 PI Feyman A, Uhlmann E, Mag M, Kretschmar G, Helsenberg M, Winkler I;
 DR WPI, 1995-180677/24.
 XX
 PT New anti-sense oligo:nucleotide analogues - with modified non-terminal
 PT pyrimidine nucleotide units, useful for treating viral infections,
 PT cancer, etc.
 XX
 PS Claim 1; Page 31; 36pp; German.
 XX
 CC The antisense oligonucleotide (ON) shown is a derivative of an equivalent
 CC wild type Human ICAM ON, in which at least one, esp. 2-10, non-terminal
 CC pyrimidine nucleotide(s) is/are modified. The modification may be: (a)
 CC replacement of a phosphodiester linkage by: a phospho-thioate (PS), -
 CC thioate, -aramidate; borano-, alkyl-, aralkyl-phosphate; 2,2,2-
 CC trichloro-1,1-dimethyl-, alkyl- or aryl- phosphonate linkage; or (3')-
 CC thio)formacetal, methylhydroxylamine, oxime, methylendimethylhydrazo,
 CC dimethylene sulphone or silyl linkage; (b) replacement of a sugar
 CC phosphate backbone by a 'morpholinonucleoside' oligomer; (c) replacement
 CC of beta-D-2-deoxyribose by another sugar or carbocyclic, open-chain or
 CC bicyclic sugar analogue; or (c) replacement of the natural nucleoside
 CC base by an analogue, e.g. 5-hydroxymethyl-uridine. The 5' and/or 3'
 CC termini may also be modified with a lipophilic gp., eg. a fattyacyl. The
 CC modifications increase nuclease resistance and thus improve stability and
 CC activity
 XX
 SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
 XX
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 Db 226 GAGAGTGTGTGTGGCGG 245
 20 GAGAGGAGGAGTGTGTGGCGG 1
 XX
 RESULT 1735
 ID AAT41336/c
 XX AAT41336 standard; DNA, 20 BP.
 AC AAT41336;
 XX
 DT 04-DEC-1996 (first entry)
 XX
 DE Human gene signature HUMGS00995-derived anti-sense primer.
 XX
 KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;
 KW human; cloning; mapping; non-biased library; diagnosis; detection;
 KW cell typing; abnormal cell function; primer; PCR; amplification;
 KW polymerase chain reaction; ss.
 XX
 OS Synthetic.
 OS
 XX WO9514772-A1.
 XX
 PD 01-JUN-1995.
 XX
 PF 11-NOV-1994; 94WO-JP001916.
 XX
 PR 12-NOV-1993; 93JP-00355504.
 XX
 PA (MATS/) MATSUBARA K.
 PA (OKUB/) OKUBO K.
 PN

```

XX Matsubara K, Okubo K;
XX WPI; 1995-206931/27.
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX Example 7; Fig 10; 2245pp; Japanese.
XX Primers T11001-T11382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T11001-T16837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative
XX abundance of different mRNAs in the particular tissue from which it was
XX derived. The appearance frequency of a given GS in a cDNA library can be
XX determined (esp. using primers and probes derived from the GS sequences)
XX as a means of diagnosing abnormal cell function or for recognising
XX different cell types. The primers T4135-6 amplify clone pm0268 which
XX comprises the GS HUMGS000995 (T11995). This amplification reaction gave a
XX prod. indistinguishable from the same PCR using mouse or Chinese hamster
XX ovary DNA as a template.
XX Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 339 GGACTTGAAGATGGGCTGTG 358
DB 20 GGTATATAAGATGGGCTGTG 1
RESULT 1736
AAQ99517/c
ID AAQ99517 standard; DNA; 20 BP.
XX
XX AAQ99517;
AC
XX 28-FEB-1996 (first entry)
XX
XX Human Fas ligand phosphorothioate antisense oligonucleotide A69.
XX
XX Fas ligand; Tumour Necrosis factor family; apoptosis; cell death;
XX Fas cell surface antigen; human; Fas-L; phosphorothioate;
XX antisense oligonucleotide; inhibition; ss.
XX
XX Synthetic.
XX
XX WO9513293-A1.
XX
XX 18-MAY-1995.
XX
XX 10-NOV-1994; 94WO-JP001899.
XX
XX 10-NOV-1993; 93JP-00305975.
XX 13-DEC-1993; 93JP-00342526.
XX 18-MAR-1994; 94JP-00074344.
XX 08-JUL-1994; 94JP-00180955.
XX 07-SEP-1994; 94JP-00239363.
XX 18-OCT-1994; 94JP-00278378.
XX
XX (MOCH) MOCHIDA PHARM CO LTD.
XX (OSAB-) OSAKA BIOSCIENCE INST.
XX
XX Nagata S, Suda T, Takahashi T, Nakamura N;
XX WPI; 1995-194031/25.
XX

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PT Peptide which binds to Fas antigen, and antibody reactive with it - for
PT treatment and diagnosis of viral or auto-immune diseases.
XX
XX Example 20; Page 111; 300pp; Japanese.
XX
XX A sense oligonucleotide S50 (AAQ99516) corresp. to nucleotides 50-69 in
XX the human Fas ligand coding sequence given in AAT03498 was synthesised
XX with phosphorothioate linkages. The complementary, antisense
XX oligonucleotide A69 (AAQ99517) was also synthesised. The effects on Fas
XX ligand-mediated apoptosis of A69 and S50 were analysed
XX
XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 483 ACCAGCTGACATCCGGCTGC 502
DB 20 ACCAGCTGCCATGCAGCAGC 1
RESULT 1737
AAQ99516
ID AAQ99516 standard; DNA; 20 BP.
XX
XX AAQ99516;
AC
XX 28-FEB-1996 (first entry)
XX
XX Human Fas ligand phosphorothioate sense oligonucleotide S50.
XX
XX Fas ligand; Tumour Necrosis factor family; apoptosis; cell death;
XX Fas cell surface antigen; human; Fas-L; phosphorothioate;
XX sense oligonucleotide; inhibition; ss.
XX
XX Synthetic.
XX
XX WO9513293-A1.
XX
XX 18-MAY-1995.
XX
XX 10-NOV-1994; 94WO-JP001899.
XX
XX 10-NOV-1993; 93JP-00305975.
XX 13-DEC-1993; 93JP-00342526.
XX 18-MAR-1994; 94JP-00074344.
XX 08-JUL-1994; 94JP-00180955.
XX 07-SEP-1994; 94JP-00239363.
XX 18-OCT-1994; 94JP-00278378.
XX
XX (MOCH) MOCHIDA PHARM CO LTD.
XX (OSAB-) OSAKA BIOSCIENCE INST.
XX
XX Nagata S, Suda T, Takahashi T, Nakamura N;
XX WPI; 1995-194031/25.
XX
XX Peptide which binds to Fas antigen, and antibody reactive with it - for
XX treatment and diagnosis of viral or auto-immune diseases.
XX
XX Example 20; Page 111; 300pp; Japanese.
XX
XX A sense oligonucleotide S50 (AAQ99516) corresp. to nucleotides 50-69 in
XX the human Fas ligand coding sequence given in AAT03498 was synthesised
XX with phosphorothioate linkages. The complementary, antisense
XX oligonucleotide A69 (AAQ99517) was also synthesised. The effects on Fas
XX ligand-mediated apoptosis of A69 and S50 were analysed
XX
XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;

```


Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 483 ACCAGCTGACATCGGCTGC 502
 |||||
 Db 1 ACCAGCTGCCATGCAGCAGC 20

RESULT 1738
 AAT44449/c
 ID AAT44449 standard; DNA; 20 BP.
 XX
 AC AAT44449;
 XX
 DT 27-JAN-1997 (first entry)
 XX
 DE Antisense oligonucleotide against ICAM gene.
 XX
 KW 8-azapurine; modification; stronger complex; inhibition;
 KW intracellular adhesion molecule; ss.
 XX
 OS Synthetic.
 XX
 PN EP680969-A2.
 XX
 PD 08-NOV-1995.
 XX
 PF 26-APR-1995; 95EP-00106230.
 XX
 PR 02-MAY-1994; 94DE-04415370.
 XX
 PA (FARH) HOECHST AG.
 XX
 PI Seela F, Lampe S;
 XX
 DR WPI; 1995-375165/49.
 XX
 PT New oligo:nucleotide(s) contg. 8-aza:purine base - useful as therapeutic
 PT and diagnostic agents with more stable hybridisation to target nucleic
 PT acid.
 XX
 PS Disclosure; Page 44; 51pp; German.
 XX
 CC AAT44425-54 are antisense oligonucleotides which have at least one 8-
 CC azapurine base. The presence of an 8-azapurine base results in
 CC significantly stronger complexing when hybridising to target nucleic
 CC acids. The present sequence is against the intracellular adhesion
 CC molecule (ICAM) gene
 XX
 SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGCGG 245
 |||||
 Db 20 GAGAGGGGAAGTGTGTGGCGG 1

RESULT 1739
 AAT44250/c
 ID AAT44250 standard; DNA; 20 BP.
 XX
 AC AAT44250;
 XX
 DT 22-JUL-1997 (first entry)
 XX
 DE ICAM antisense component of capped oligonucleotide.
 XX
 KW Antisense therapy; guanosine; intercellular adhesion molecule; ICAM;
 KW nuclease resistance; stability; ss.
 XX
 OS Synthetic.

XX
 PN DE19502912-A1.
 XX
 PD 01-AUG-1996.
 XX
 PF 31-JAN-1995; 95DE-01002912.
 XX
 PR 31-JAN-1995; 95DE-01002912.
 XX
 PA (FARH) HOECHST AG.
 XX
 PI Peyman A, Uhlmann E;
 XX
 DR WPI; 1996-355223/36.
 XX
 PT Oligo:nucleotide(s) with series of G residues at at least one end have
 PT increased stability against nuclease and cell penetration, - are partic.
 PT anti:sense sequences for treating and diagnosing cancer, viral diseases
 PT etc.
 XX
 PS Claim 3; Page 13; 15pp; German.
 XX
 CC Ten- to 40-mer oligonucleotides which have a cap of 1-10 (esp. 4) G
 CC residues on at least one end are provided; if caps are present at both
 CC ends, they can be of the same or different lengths. A cap sequence
 CC increases nuclease resistance of the oligonucleotide and also increases
 CC cell penetration. The present sequence is that of a preferred
 CC oligonucleotide, directed against an intercellular adhesion molecule
 CC sequence, which can be capped for use in anticancer therapy
 XX
 SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGCGG 245
 |||||
 Db 20 GAGAGGGGAAGTGTGTGGCGG 1

RESULT 1740
 AAX33922/c
 ID AAX33922 standard; DNA; 20 BP.
 XX
 AC AAX33922;
 XX
 DT 30-JUN-1999 (first entry)
 XX
 DE ICAM expression inhibitor.
 XX
 KW Gene expression inhibitor; probe; nucleic acid detection; growth factor;
 KW viral infection; therapy; HSV-1; cancer; restenosis; integrin;
 KW cell-cell adhesion receptor; ICAM; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN AU9648028-A.
 XX
 PD 26-SEP-1996.
 XX
 PF 12-MAR-1996; 96AU-00048028.
 XX
 PR 13-MAR-1995; 95DE-01008923.
 XX
 PR 24-NOV-1995; 95DE-01043865.
 XX
 PA (FARH) HOECHST AG.
 XX
 PI Peyman A, Uhlmann E, Breipohl G, Wallmeier H;
 XX
 DR WPI; 1996-455932/46.
 XX


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PN EP764721-A1.
XX
XX 26-MAR-1997.
PD
XX 17-SEP-1996; 96EP-00114885.
PF
XX 18-SEP-1995; 95JP-00264943.
PR
XX (UYCH-) UNIV CHIBA SUSUMU SEINO INOHANA SHUKUSHA.
PA (JCRP-) JCR PHARM CO LTD.
XX
XX Seino S, Inagaki N;
XX WPI; 1997-181836/17.
DR
XX Human and mouse pancreatic ATP sensitive potassium channel proteins - for
PT diagnosis, therapy and research into potassium channel related diseases,
PT e.g. diabetes.
PT
XX Example 3; Fig 6; 16pp; English.
PS
XX PCR primers (AAT61868-79) were designed to amplify subregions A-F of the
XX human pancreatic ATP sensitive potassium channel beta-IR gene (see also
CC AAT61866). The antisense primer (AAT61877) for subregion B (249 bp)
CC corresponds to nucleotides 999-1019 of the gene. Cys-labelled primers
CC were used in the PCR-SSCP analysis of genomic DNA collected from 20
CC healthy Japanese subjects
CC
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 885 TGGCAACATCATCAACATGC 904
DB 20 TGGCAACACCATCAAGTGC 1
RESULT 1746
AAT48972/C
ID AAT48972 standard; DNA; 20 BP.
XX
XX AAT48972;
AC
XX 18-SEP-1997 (first entry)
DT
XX
XX Complementary human MRP oligonucleotide 3(3B)MRP.
DE
XX Human multidrug resistance-1; MDR-1; inhibition; apameric;
XX human multidrug resistance-associated protein; antitense; cytotoxic;
XX chemotherapeutic; cancer; ss.
XX
XX Synthetic.
OS
XX Key location/Qualifiers
XX misc_feature 1..20
XX /tag= a
XX /note= "Backbone selected from: phosphorothioate;
XX dithioate; methylphosphonate; phosphodiester; morpholino
XX backbone; polyamide backbone; and any combination of
XX these backbone types; the backbone may be modified to
XX incorporate a ribozyme structure, or a pendant group"
XX
XX MO9640715-A1.
XX
XX 19-DEC-1996.
PD
XX
XX 06-JUN-1996; 96WO-US009388.
XX
XX 07-JUN-1995; 95US-00487141.
XX
XX (TYNE-) UNIV NEBRASKA.
XX
XX
```

```
XX Smith LJ;
PI
XX WPI; 1997-052217/05.
DR
XX
XX Oligo-nucleotide(s) able to inhibit multi-drug resistant phenotype -
XX either by anti-sense or apameric effects; useful for enhancing cytotoxic
XX effects of chemotherapeutic agents on multi-drug resistant cancer cells.
XX
XX Disclosure; Page 17; 74pp; English.
PS
XX
XX The present sequence represents a novel oligonucleotide 3(3B)MRP that
XX specifically hybridises in a human cell with a complementary sequence of
XX human multidrug resistance-associated protein (MRP) gene. Hybridisation
XX causes inhibition of expression of the multidrug resistance phenotype by
XX the cell, due to the oligonucleotide having an apameric inhibitory
XX effect as well as an antisense inhibitory effect. The oligonucleotide is
XX administered to cancer patients to prevent development of the multidrug
XX resistant phenotype. When co-administered with chemotherapeutic agents,
XX the oligonucleotide is useful for potentiating elimination of multidrug
XX resistant tumour cells from bone marrow or peripheral stem cell grafts.
XX Also, the oligonucleotide can be used as an immunosuppressive agent
XX
SQ Sequence 20 BP; 1 A; 5 C; 10 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 733 GCACCTGCACCGCATCCG 752
DB 20 GCAGCAGCCACCGCATCCG 1
RESULT 1747
AAT72304/C
ID AAT72304 standard; DNA; 20 BP.
XX
XX AAT72304;
AC
XX 25-MAR-2003 (revised)
DT
XX 10-SEP-1997 (first entry)
DT
XX
XX P16 promoter specific reverse primer.
DE
XX
XX Primer; polymerase chain reaction; PCR; amplification; P16; promoter; ss.
XX
XX Synthetic.
OS
XX US5624819-A.
XX
XX 29-APR-1997.
PD
XX
XX 07-JUN-1995; 95US-00474177.
XX
XX 18-MAR-1994; 94US-00214582.
XX
XX 18-MAR-1994; 94US-00215086.
XX
XX 18-MAR-1994; 94US-00215087.
XX
XX 14-APR-1994; 94US-00227369.
XX
XX 01-JUN-1994; 94US-00251938.
XX
XX 17-MAR-1995; 95WO-US003537.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX (UTAH ) UNIV UTAH RES FOUND.
XX
XX Cannon-Albright LA, Kamb A, Skolnick MH;
XX
XX WPI; 1997-258217/23.
XX
XX Human mutant multiple tumour suppressor gene sequences - for production
XX of recombinant mutant polypeptide(s).
XX
XX Example 12; Col 83-84; 72pp; English.
XX
XX
```

XX The present sequence is primer for the PCR amplification of the P16
CC promoter. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGCTACCTGAGAGCT 524
DB 20 GAGGCTTCTGACACGCT 1
RESULT 1748
AAT98014
ID AAT98014 standard; DNA; 20 BP.
AC AAT98014;
XX
XX
XX 25-MAR-2003 (revised)
DT 08-SEP-1998 (first entry)
XX
XX Human or simian immunodeficiency virus detection primer MMY4B.
DE
XX
KW Primer: PCR; amplification; gag; vpr; pol; vpu; HIV-1; HIV-2; SIV; nef2;
KM vif2; vpx; detection; ss.
XX
XX Synthetic.
OS Human immunodeficiency virus.
OS Simian immunodeficiency virus.
XX
PN EP806484-A2.
XX
PD 12-NOV-1997.
XX
PF 05-JUN-1990; 97EP-00110543.
XX
XX 02-JUN-1989; 89FR-00007354.
PR 20-SEP-1989; 89FR-00012371.
PR 05-JUN-1990; 90EP-00401520.
XX
PA (INSP) INST PASTEUR.
PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PI Moncany M, Montagnier L;
XX
PI WPI; 1997-538622/50.
DR
XX
PT Oligo-nucleotide primers for amplifying retroviral nucleic acids -
PT comprising conserved sequences of human immunodeficiency virus and simian
PT immunodeficiency virus genes.
XX
PS Claim 4; Page 18; 23pp; French.
XX
CC The oligonucleotides AAT98010-T98059 are useful as primers for nucleic
CC acid amplification of conserved sequences of the gag, vpr, pol or vpu
CC genes of the HIV-1 strains Bru, Mal, Etl, HIV-2 ROD or simian
CC immunodeficiency virus (SIV) MAC or the nef2, vif2 or vpx genes of HIV-2
CC ROD and SIV MAC. This primer is targeted to sequences in the gag gene of
CC the viral strains. The sequence are therefore used to detect HIV-1, HIV-2
CC or SIV infections. (Updated on 25-MAR-2003 to correct PF field.) (Updated
CC on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 3 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 72.2%; Pred. No. 1.1e+03;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1703 CTCGCTACCTGCTGA 1720
||:|||||:|||||

DB 1 CTTGCAATRGCTGCTGA 18
RESULT 1749
AAT47409/C
ID AAT47409 standard; DNA; 20 BP.
AC AAT47409;
XX
XX
XX 10-SEP-1997 (first entry)
DT
XX
DE Primer #35 for cystic fibrosis transmembrane regulator gene.
XX
XX PCR; primer; amplify; polymerase chain reaction; bacteriophage; M13mp18;
KW cystic fibrosis transmembrane conductance regulator gene; multiplex PCR;
KW chimeric primer; genetic screening; mutation detection; CFTR;
KW Wilms Tumour gene; beta-thalassaemia gene; ss.
XX
XX Synthetic.
OS
XX
XX WO9641012-A1.
XX
XX 19-DEC-1996.
PD
XX
XX 06-JUN-1996; 96WO-US0009637.
PF
XX
XX 07-JUN-1995; 95US-00474450.
PR
XX
PA (GENZ) GENZYME CORP.
XX
XX Shuber AP;
PI
XX
XX WPI; 1997-052372/05.
DR
XX
PT Universal primer used for multiplex DNA amplification - allows
PT simultaneous amplification of multiple DNA target sequences for high
PT throughput genetic screening.
XX
PS Example 3; Fig 1b; 38pp; English.
XX
CC AAT4775-T47409 represent amplification primers for the cystic fibrosis
CC transmembrane regulator (CFTR) gene. These sequences can be used as half
CC of the chimeric primer of the invention. The primers are used for
CC amplification of a target DNA sequence, and can be used in a multiplex
CC PCR amplification. The primers have the sequence 5'-XX-3', where X is a
CC sequence that does not hybridise to the target sequence (such as AAT47344
CC -T47374), and Y is a sequence contained within or flanking the target
CC sequence (such as this sequence). During early cycles of amplification,
CC products are synthesised that contain the chimeric primers on either end.
CC The primers then serve as high stringency recognition sequences for
CC subsequent rounds of amplification. As a result, the annealing efficiency
CC of different primers and their targets in a multiplex amplification
CC reaction is normalised, thereby reducing preferential amplification of
CC certain targets. The chimeric primer comprise a 5' universal domain and a
CC 3' target-specific domain. They are used for the simultaneous PCR
CC amplification of multiple DNA targets in a sample. The primer containing
CC AAT47344 is particularly useful in high-throughput genetic screening for
CC detecting the presence of multiple defined targets e.g. to detect
CC mutations in genes like the CFTR, the Wilms Tumour, and the beta-
CC thalassaemia genes
XX
SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1223 TGGAGGAAACGCTACCTTC 1242
DB 20 TGGAGCAACAGCTACTTTC 1
||:|||||:|||||

RESULT 1750

AA194038
 ID AA194038 standard; cDNA; 20 BP.
 XX
 AC
 XX
 AA194038;
 XX
 DT 25-MAR-2003 (revised)
 DT 01-APR-1998 (first entry)
 XX
 DE Forward PCR primer used to amplify a 241 bp fragment of cMOAT cDNA.
 XX
 KM Canalicular multispecific organic anion transporter protein;
 KM cMOAT protein; ATP-binding cassette transporter family; ABC transporter;
 KM hepatobiliary excretion; multidrug resistance-associated protein;
 KM cMOAT protein activity; multidrug resistance-related protein; MDR-1;
 KM Dubin-Johnson disease; Rotor disease; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX MO931111-A2.
 XX
 XX 28-AUG-1997.
 XX
 XX 21-FEB-1997; 97WO-NL000079.
 XX
 XX 22-FEB-1996; 96EP-00200460.
 XX
 XX (INTR-) INTRIGENE BV.
 XX (MEDI-) ACAD MEDISCH CENT AMSTERDAM.
 XX (HETN-) HET NEDERLANDS KANKER INST.
 XX
 XX Oude Elferink RPI, Paulusma CC, Bosma PJ, Borst P, Evers R;
 PI Kool M;
 DR WPI; 1997-435163/40.
 XX
 PT DNA encoding human and rat canalicular multispecific organic anion
 PT transporter proteins - useful for diagnosis and treatment of Dubin-
 PT Johnson disease and Rotor disease.
 PT
 XX
 XX Example 6; Page 29; 106pp; English.
 XX
 PS PCR primers AA194038-39 were used to amplify a 241 bpo fragment of
 CC canalicular multispecific organic anion transporter (cMOAT) protein cDNA.
 CC The PCR product was cloned, and subsequently used in a RNase protection
 CC assay. cMOAT is a new member of the ATP-binding cassette (ABC)
 CC transporter family. The ATP dependent cMOAT transporter system mediates
 CC hepatobiliary excretion in the liver. cMOAT may be a liver-specific
 CC homologue of multidrug resistance-associated protein. The nucleic acids
 CC are used to provide cells with cMOAT protein activity. cMOAT protein
 CC activity in cells can be enhanced by increasing the level of glutathione,
 CC glutathione and/or sulphate. Antisense constructs, especially derived
 CC from another multidrug resistance (MDR)-related protein, e.g. MDR-1, to
 CC the nucleic acids and vectors can be used to decrease the level of cMOAT
 CC in a cell. The nucleic acids and proteins can be used especially in
 CC diagnosis of Dubin-Johnson disease, Rotor disease or another disease
 CC involving cMOAT. The cMOAT gene may also be used as a selectable marker
 CC gene. (Updated on 25-MAR-2003 to correct PI field.)
 CC
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1239 CTCATCTTCCGATCTTAG 1258
 DB 1 CTGCCTTTCAGAACTTAG 20
 RESULT 1751
 AAV53844/c
 ID AAV53844 standard; DNA; 20 BP.

XX
 AC AAV53844;
 XX
 DT 04-DEC-1998 (first entry)
 XX
 DE Nucleotide sequence of P16 specific reverse PCR primer.
 XX
 KM Multiple tumour suppressor; MTS; human; cancer; hybridisation;
 KM somatic mutation; gene therapy; PCR; primer; amplification; ss.
 XX
 OS Synthetic.
 XX
 XX US5801236-A.
 XX
 XX 01-SEP-1998.
 XX
 XX 07-JUN-1995; 95US-00480810.
 XX
 XX 18-MAR-1994; 94US-00214582.
 XX
 XX 18-MAR-1994; 94US-00215086.
 XX
 XX 18-MAR-1994; 94US-00215087.
 XX
 XX 14-APR-1994; 94US-00227369.
 XX
 XX 01-JUN-1994; 94US-00251938.
 XX
 XX 17-MAR-1995; 95WO-US003316.
 XX
 XX (MYRI-) MYRIAD GENETICS INC.
 XX
 XX Kamb A;
 XX
 XX WPI; 1998-494842/42.
 XX
 XX Nucleic acids based on multiple tumour suppressor, MTS, sequences -
 XX useful as hybridisation probes, primers and recombinant production of MTS
 XX in the diagnosis and treatment of cancers related to MTS mutation(s).
 XX
 XX Example 12; Col 85-86; 73pp; English.
 XX
 PS This is the nucleotide sequence of a PCR primer used for amplification in
 CC the method of the invention involving the use of the multiple tumour
 CC suppressor (MTS) gene, to diagnose and treat cancer. The MTS gene is
 CC useful in the diagnosis and prognosis of human cancer, e.g. by standard
 CC nucleic hybridisation techniques, of patient samples. The mutated
 CC sequences are those that are present in somatic mutations of the gene in
 CC cancers. The vectors can be used for gene therapy strategies to replace
 CC function of mutated protein in patients. These can also be used to
 CC construct protein mimetics, also for therapeutic strategies. In addition
 CC the expression constructs can also be used for recombinant production of
 CC MTS. Recombinant MTS can be used to screen for drugs to be used for
 CC cancer therapy, and the protein itself may also be used to restore MTS
 CC function in a cell
 CC
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 505 GAGGCTACCTGGAGAGCT 524
 DB 20 GAAGCTTCTCGACACGCT 1
 RESULT 1752
 AAV47686/c
 ID AAV47686 standard; DNA; 20 BP.
 XX
 AC AAV47686;
 XX
 XX 20-NOV-1998 (first entry)
 XX
 DE Unmethylated CpG dinucleotide 2001.
 XX
 XX Unmethylated CpG dinucleotide; immune response; bacterial meningitis;

KW natural killer cell activation; NK cell; Th2 response; neonatal sepsis;
 KW pulmonary disorder; asthma; environmentally induced airway disease;
 KW bacterial infection; endotoxaemia; therapy; cystic fibrosis;
 KW inflammatory bowel disease; ss.
 XX
 OS Synthetic.
 XX
 XX WO9837919-A1.
 PM
 XX
 PD 03-SEP-1998.
 PF 25-FEB-1998; 98WO-US003678.
 PR 28-FEB-1997; 97US-0039405P.
 PA (IOWA) UNIV IOWA RES FOUND.
 PI Schwartz DA, Krieg AM;
 XX
 DR WPI; 1998-480941/41.
 FT Use of nucleic acids containing an unmethylated CpG - for treating a
 PT subject having or at risk of having an acute decrement in air flow or
 PT inhibiting an inflammatory response.
 PS
 XX Claim 35; Page 27; 65pp; English.
 CC This sequence represents an unmethylated CpG dinucleotide, and can be
 CC used in the method of the invention. The method is for treating a subject
 CC having, or at risk of having an acute decrement in air flow, comprising
 CC administering a nucleic acid sequence containing at least one
 CC unmethylated CpG. The nucleic acids containing an unmethylated CpG
 CC dinucleotide affect an immune response in a subject by activating natural
 CC killer cells (NK) or redirecting a subject's immune response from a Th2
 CC to a Th1 response by inducing monocytic and other cells to produce Th1
 CC cytokines. They can be used to treat pulmonary disorders having an
 CC immunologic component, such as asthma or environmentally induced airway
 CC disease. They can also be used to treat diseases associated with Gram-
 CC positive bacterial infections or endotoxaemia including bacterial
 CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
 CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
 CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or
 CC an inflammatory response to lipopolysaccharide
 XX
 SQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 555 CCTGAGCGCGCGCTCCGTC 574
 Db 20 CCGCGCGCGCGCGCGCGCC 1
 RESULT 1753
 AAV60732/c
 ID AAV60732 standard; DNA; 20 BP.
 XX
 AC AAV60732;
 XX
 DT 08-DEC-1998 (first entry)
 DE Primer #2 for human CDK2 codons 1-149.
 XX
 XX PCR primer; amplification; yeast; UAS; upstream activating sequence;
 KW transcription terminator; cell cycle; Upstream Activation Sequence; UAS;
 KW promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector;
 KW cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX

EN WO9816660-A1.
 XX
 PD 23-APR-1998.
 XX
 PF 16-OCT-1997; 97WO-US018608.
 XX
 PR 16-OCT-1996; 96US-0029127P.
 PM 27-NOV-1996; 96US-0031968P.
 XX
 PA (BITT-) BITTECH INC.
 PI Bitter GA;
 XX
 DR WPI; 1998-251302/22.
 FT Screening for agents that effect cell cycle regulatory proteins - using a
 PT cell line that expresses a reporter gene in response to regulation
 PT through phosphorylation by a cyclin/CDK system.
 PS
 XX Example 4; Page 70; 93pp; English.
 CC Primers AAV60731-V60732 were used to PCR amplify codons 1-149 of the
 CC human cyclin-dependent kinase 2 (hCDK2) gene. The amplified product was
 CC used to generate a fusion protein comprising part of the hCDK2 sequence
 CC linked to codons 154-302 of the yeast PHO85 gene. The fusion protein is
 CC used to screen for compounds that affect mammalian cell cycle regulatory
 CC proteins. The method comprises administering a compound to a cell line,
 CC which contains a reporter gene linked to an Upstream Activation Sequence
 CC (UAS) and a promoter, where the UAS binds a transcription control factor
 CC (TCP) which is regulated through cyclin/cyclin-dependent kinase (CDK)
 CC phosphorylation. Also included in the construct is an effector gene
 CC providing a gene product to permit normal cyclin/CDK regulation of the
 CC TCP. Expression of the reporter gene is then analysed in the cell line.
 CC thereby determining whether the compound affects the normal regulation.
 CC The method can be used to identify inhibitors and activators of mammalian
 CC cell cycle regulatory proteins, especially inhibitors and activators of
 CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and
 CC cyclin/CDK/CKI complexes. The identified agents can be used for
 CC stimulating growth of cells (as in wound healing), or regulating
 CC excessive cell growth and division (as in cancer therapy)
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1031 CTGACTTTGGCGCTGCGCGA 1050
 Db 20 CAGACTTTGGACTAGCCAGA 1
 RESULT 1754
 AAV69958/c
 ID AAV69958 standard; DNA; 20 BP.
 XX
 AC AAV69958;
 XX
 DT 04-FEB-1999 (first entry)
 DE Human c-fos protein antisense oligonucleotide #20.
 XX
 XX Human; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;
 KW antisense oligonucleotide; phosphorothioate; regulation;
 KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /+tag= a
 FT /note= "phosphorothioate linkages"

XX XX W09846272-A1.
 XX XX 22-OCT-1998.
 XX XX 14-APR-1998; 98WO-US007386.
 XX XX 14-APR-1997; 97US-00837201.
 XX XX (ISIS-) ISIS PHARM INC.
 XX XX Dean NM, McKay R, Miraglia L, Baker B;
 XX XX WPI; 1998-603906/51.
 DR XX
 PT Antisense oligonucleotides regulating Activating Protein 1 subunits -
 PT hydride with c-fos and c-jun mRNA, used for regulating metastasis, cell
 PT cycle expression and hyperproliferative disease.
 XX XX
 XX Claim 5; Page 74; 120pp; English.
 XX XX
 CC AAV69949 to AAV69977 represent antisense oligonucleotides which are
 CC specifically hybridisable with a region of a nucleic acid encoding human
 CC c-Fos protein. The antisense compound regulates the expression of the c-
 CC Fos protein. The present invention also describes antisense
 CC oligonucleotides which regulate the c-Jun protein. The antisense
 CC oligonucleotides are used for the diagnosis and treatment of diseases or
 CC disorders associated with Activating Protein 1 expression, of which c-Fos
 CC and c-Jun are subunits. The antisense oligonucleotides are used in
 CC compositions as c-Fos and/or c-Jun together with a carrier and a
 CC chemotherapeutic agent. They are used to regulate the expression of c-Fos
 CC or c-Jun in cells or tissues, preferably by inhibiting metastasis. They
 CC also regulate cell cycle expression and can be used to treat an animal
 CC with, or being prone to, a hyperproliferative disease
 XX XX
 SQ Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 725 AAGAGGGGACCTGACCC 744
 Db 20 AAGGGGAGGACGCGGACCC 1

RESULT 1755
 AAV11263/C
 ID AAV11263 standard; DNA; 20 BP.
 XX XX
 AC AAV11263;
 XX XX
 DT 15-JUL-1998 (first entry)
 XX XX
 DE Human MTS1 and MTS1B1-beta PCR primer #1.
 XX XX
 KW MTS1, MTS1B1-beta; multiple tumour suppressor; diagnosis; cancer;
 KW germ-line mutation; familial melanoma locus; MLM; predisposition; ss.
 XX XX
 OS Synthetic.
 OS Homo sapiens.
 XX XX
 PA US5739027-A.
 XX XX
 PN 14-APR-1998.
 XX XX
 PD 14-APR-1998.
 XX XX
 PF 07-JUN-1995; 95US-00487033.
 XX XX
 XX 18-MAR-1994; 94US-00214582.
 XX 18-MAR-1994; 94US-00215086.
 PR 18-MAR-1994; 94US-00215087.
 PR 14-APR-1994; 94US-00227369.
 PR 01-JUN-1994; 94US-00251938.

PR 17-MAR-1995; 95WO-US003316.
 XX XX
 PA (MYRI-) MYRIAD GENETICS INC.
 XX XX
 PI Kamb A;
 XX XX
 DR WPI; 1998-250421/22.
 XX XX
 PT DNA specific for Multiple Tumour Suppressor 1B1-beta gene - are useful
 PT for the diagnosis of cancers related to MTS1B1-beta mutation(s) and their
 PT treatment.
 XX XX
 XX Example 12; Col 85-86; 72pp; English.
 XX XX
 CC Primers AAV11260-V11266 are used in the isolation of the human multiple
 CC tumour suppression proteins, MTS1 and MTS1B1-beta. The MTS gene locus is
 CC also referred to as the familial melanoma (MLM) gene locus, located on
 CC human chromosome 9p21. Germ line mutations in MTS genes can be used in
 CC the diagnosis of predisposition to cancers, e.g. melanoma, leukaemia,
 CC astrocytoma, glioblastoma, lymphoma, glioma, Hodgkin's lymphoma, CLL,
 CC and cancers of the pancreas, breast, thyroid, ovary, uterus, testis,
 CC kidney, stomach and rectum
 XX XX
 SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGCTTACCTGAGACGCT 524
 Db 20 GAAGGCTTCTGACACGCT 1

RESULT 1756
 AA218169
 ID AA218169 standard; DNA; 20 BP.
 XX XX
 AC AA218169;
 XX XX
 DT 11-OCT-1999 (first entry)
 XX XX
 DE PTK 19 gene specific primer.
 XX XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX XX
 OS Synthetic.
 OS Homo sapiens.
 XX XX
 PN W09934016-A2.
 XX XX
 PD 08-JUL-1999.
 XX XX
 PF 28-DEC-1998; 98WO-IL000625.
 XX XX
 PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX XX
 PA (GENE-) GENENEA LTD.
 XX XX
 PI Vidar B;
 XX XX
 DR WPI; 1999-419113/35.
 DR P-PSDB; AAV14704.
 XX XX
 PT Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX XX
 PS Claim 4; Page 46; 102pp; English.

CC The invention provides a new method for identifying and characterizing
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterizing cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AA217803-218342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes

SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1024 AACCTGGCTGACTTTGGCCT 1043
|||||
Db 1 AACCTCGGGGACTTTGGGCT 20
|||||

RESULT 1757
AA218167
ID AA218167 standard; DNA; 20 BP.
XX
AC AA218167;
XX

DT 11-OCT-1999 (first entry)

DE PTK 18 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KM primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX

PN MO9934016-A2.

PD 08-JUL-1999.

PF 28-DEC-1998; 98WO-IL000625.

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENNA LTD.

PA Viader B;

PI WPI; 1999-419113/35.

DR P-PSDB; AAY14702.

PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.

XX Claim 4; Page 46; 102pp; English.

XX The invention provides a new method for identifying and characterizing
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterizing cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AA217803-218342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes

SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1024 AACCTGGCTGACTTTGGCCT 1043
|||||
Db 1 AACCTCGGGGACTTTGGGCT 20
|||||

RESULT 1758
AA218165
ID AA218165 standard; DNA; 20 BP.
XX
AC AA218165;
XX

DT 11-OCT-1999 (first entry)

DE PTK 17 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KM primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX

PN MO9934016-A2.

PD 08-JUL-1999.

PF 28-DEC-1998; 98WO-IL000625.

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENNA LTD.

PA Viader B;

PI WPI; 1999-419113/35.

DR P-PSDB; AAY14700.

PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.

XX Claim 4; Page 46; 102pp; English.

XX The invention provides a new method for identifying and characterizing
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for

CC characterizing cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desided
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

QQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1024 AAGCTGGCTGACTTTGGCCT 1043
 DB 1 AAGCTCGGGGACTTTGGCCT 20

RESULT 1759
 ID AAZ20186/c
 ID AAZ20188 standard; CDNA; 20 BP.
 AC AAZ20188;
 XX
 XX 05-JAN-2000 (first entry)
 DT
 XX Pregnancy associated glycoprotein (PAG) reverse primer B.
 DE
 XX PAG; pregnancy associated glycoprotein; cattle; diagnosis; PCR; primer;
 KM ss.
 XX Synthetic.
 OS Bos taurus.
 PN WO9947934-A2.
 XX
 XX 23-SEP-1999.
 PD
 XX 19-MAR-1999; 99MO-US006038.
 PF
 XX 20-MAR-1998; 98US-0078783P.
 PR 28-OCT-1998; 98US-0106188P.
 XX
 XX (UMOR) UNITV MISSOURI.
 PA
 PI Roberts RM, Green JA, Xie S;
 XX
 XX MPI: 1999-601132/51.
 DR
 XX
 PT New bovine polypeptides useful for early diagnosis of pregnancy.
 PS
 XX Example 3; Page 52; 136pp; English.

This reverse primer was used with a forward primer (see AAZ20187) in the
 CC PCR amplification of a poorly conserved 407 bp fragment of bovine
 CC pregnancy associated glycoprotein (PAG) PAG1. 5, 6 and 7 CDNA (see
 CC AAZ20191, AAZ20164, AAZ20165, AAZ20166). Another primer pair (see
 CC AAZ20185-86) was used to amplify a poorly conserved 536 bp fragment of
 CC bovine PAG2, 4, 8, 9 or 11 CDNA (see AAZ20162, AAZ20163, AAZ20179,
 CC AAZ20167, AAZ20181). The amplified fragments were used as probes in
 CC experiments to demonstrate that certain PAGs, including bovine PAG4, 5, 7
 CC and 9 (see AAZ20163-67), are expressed in trophoblast binucleate cells
 CC and in the syncytium formed between trophoblast and uterine epithelium.
 CC Such PAGs are useful in immunoassays of the invention for the early
 CC diagnosis of pregnancy

QQ Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

QQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 667 GGCAAAAGCAAGCTCAGCA 686
 DB 20 GGCAAAAGCAAGCTCAGCAA 1

RESULT 1760
 ID AAZ11521/c
 ID AAZ11521 standard; DNA; 20 BP.
 AC AAZ11521;
 XX
 XX 05-NOV-1999 (first entry)
 DT
 XX Human c-raf kinase antisense oligo ISIS # 5149.
 DE
 XX Human; raf; diagnosis; abnormal proliferative state; hyperproliferation;
 KW cancer; psoriasis; blood vessel restenosis; c-raf kinase; antisense; ss.
 XX
 XX Synthetic.
 OS Homo sapiens.
 PN US9592229-A.
 XX
 XX 14-SEP-1999.
 PD
 XX 26-NOV-1996; 96US-00756806.
 PF
 XX 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95MO-US007111.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 PI Boggs RT, Monia BP;
 XX
 XX MPI: 1999-527018/44.
 DR
 XX Oligonucleotides targeted to human raf mRNA useful for treating and
 PT diagnosing abnormal proliferative states and inhibiting raf expression.
 PS
 XX Disclosure; Col 9; 29pp; English.

XX The invention provides antisense oligonucleotides targeted to mRNA
 CC encoding human raf and capable of inhibiting raf expression. The
 CC antisense oligonucleotides are useful for treating and diagnosing
 CC abnormal proliferative states and hyperproliferation (e.g. cancer,
 CC psoriasis, or blood vessel restenosis), and inhibiting raf expression.
 CC Sequences AAZ11511-537 and AAZ11565-573 represent antisense
 CC oligonucleotides for human c-raf kinase

XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

QQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1186 ATGGCCACAGGCGCTCCCT 1205
 DB 20 ATGGCTCCAGGCGCTCACCCT 1

RESULT 1761
 ID AAZ07001/c
 ID AAZ07001 standard; DNA; 20 BP.
 AC AAZ07001;
 XX
 XX 15-NOV-1999 (first entry)
 DT

```
XX DE Human GABA B receptor subunit HG20 PCR primer ngfl7-.
XX XX
XX KM Gamma-amino-butyric acid B receptor subunit; HG20; GABABR1a; depression;
XX KM epilepsy; neuropsychiatric disorder; dementia; muscular contraction;
XX KM central nervous system disorder; PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9940114-A1.
XX PD 12-AUG-1999.
XX XX
XX PF 03-FEB-1999; 99WO-US002361.
XX XX
XX PR 05-FEB-1998; 98US-0073767P.
XX XX
XX PA (MERI ) MERCK & CO INC.
XX PA (MERI ) MERCK FROST CANADA INC.
XX PA (UTTE-) UNIV TEXAS HEALTH SCI CENT SAN ANTONI.
XX PA (USSH ) US NAT INST OF HEALTH.
XX PI Liu Q, McDonald T, Bonnett TP, Ng GYK, Kolakowski LF, Clark J,
XX PI Bonner TJ;
XX DR WPI; 1999-527300/44.
XX XX
XX PT New DNA encoding human and murine receptor subunits, useful for
XX PT identifying agonists and antagonists for treatment of depression,
XX PT epilepsy and neuropsychiatric disorders.
XX PS Example 22; Page 85; 128pp; English.
XX XX
XX CC The present invention describes two gamma-amino-butyric acid (GABA) B
XX CC receptor (GABABR) subunits designated HG20 and GABABR1a. Cells expressing
XX CC the new receptor subunits are useful for identifying GABABR agonists and
XX CC antagonists. HG20 proteins and their antagonists are useful for
XX CC inhibiting HG20 or GABABR function, useful for treating depression,
XX CC epilepsy, neuropsychiatric disorders, dementias, muscular contractions,
XX CC and central nervous system disorders. The present sequence represents a
XX CC PCR primer for human HG20, which is used in the exemplification of the
XX CC present invention
XX XX
XX SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
XX XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 901 ATGCACACGCTGAAACTGTT 920
Db 20 AGGCACAGCTGGAACCTGTT 1
XX XX
XX RESULT 1762
XX AAX58122
XX ID AAX58122 standard; DNA; 20 BP.
XX XX
XX AC AAX58122;
XX XX
XX DT 21-JUL-1999 (first entry)
XX XX
XX DE Human iPPK-2 antisense oligonucleotide.
XX XX
XX KM Human; iPPK-2; cancer malignancy diagnostic assay; inflammatory disease;
XX KM inducible phosphofructokinase-2; tumour; malignant cancer; diagnosis;
XX KM therapy; cancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PN WO9923108-A1.
```

```
XX XX
XX PD 14-MAY-1999.
XX XX
XX PF 30-OCT-1998; 98WO-US023155.
XX XX
XX PR 31-OCT-1997; 97US-00961578.
XX XX
XX PA (PICO-) PICOMER INST MEDICAL RES.
XX PA (CHES/) CHESNEY J A.
XX PA (MITC/) MITCHELL R A.
XX PI Bucala RJ;
XX XX
XX DR WPI; 1999-313301/26.
XX XX
XX PT Cancer malignancy diagnostic assay useful for diagnosis of malignant
XX PT cancer and, in treatment of cancer and inflammatory disease.
XX XX
XX PS Claim 4; Page 13; 41pp; English.
XX XX
XX CC This sequence represents a human iPPK-2 antisense oligonucleotide. The
XX CC invention relates to a cancer malignancy diagnostic assay for determining
XX CC the presence of inducible phosphofructokinase-2 (iPPK-2) specific
XX CC sequences in a sample of a body or tumour fluid or tissue. The assay
XX CC comprises obtaining a sample of a body or tumour fluid or tissue and
XX CC performing a sequence identity assay to look for the presence of iPPK-2
XX CC specific sequences. The method is useful for diagnosis of malignant
XX CC cancer by detecting the presence of iPPK-2 specific sequences. Antisense
XX CC iPPK-2 oligonucleotides are useful for treatment of cancer and
XX CC inflammatory disease. Antagonists of iPPK-2, such as an iPPK-2 enzyme
XX CC inhibitor or anti-iPPK-2 antibody are also useful for treatment of cancer
XX CC and inflammatory disease
XX XX
XX SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1679 CCAACTACATCTTCCTGCT 1698
Db 1 CCAACGCGCATCTTCGCGCT 20
XX XX
XX RESULT 1763
XX AAX58144/c
XX ID AAX58144 standard; DNA; 20 BP.
XX XX
XX AC AAX58144;
XX XX
XX DT 21-JUL-1999 (first entry)
XX XX
XX DE Human iPPK-2 antisense oligonucleotide.
XX XX
XX KM Human; iPPK-2; cancer malignancy diagnostic assay; inflammatory disease;
XX KM inducible phosphofructokinase-2; tumour; malignant cancer; diagnosis;
XX KM therapy; cancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PN WO9923108-A1.
XX PD 14-MAY-1999.
XX XX
XX PF 30-OCT-1998; 98WO-US023155.
XX XX
XX PR 31-OCT-1997; 97US-00961578.
XX XX
XX PA (PICO-) PICOMER INST MEDICAL RES.
XX PA (CHES/) CHESNEY J A.
XX PA (MITC/) MITCHELL R A.
XX XX
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```

QY      226 GAGACTGGTGGTGGGCGG 245
      ||||| ||||| |||||
KW      20 GAGAGGGGGAAGTGTGGGGG 1
      ||||| ||||| |||||

RESULT 1766
AAV70608/C
ID      AAV70608 standard; DNA; 20 BP.
XX
AC      AAV70608;
XX
DT      20-MAR-2003 (revised)
DT      03-FEB-1999 (first entry)
XX
DE      PCR primer used to isolate murine MST1E1-beta gene.
XX
KW      Human; multiple tumour suppressor 1 gene; MST1; cancer; PCR primer; ss.
XX
OS      Synthetic.
OS      Mus sp.
XX
PN      US5843756-A.
XX
PD      01-DEC-1998.
XX
PF      28-JUL-1995; 95US-00508735.
XX
PR      17-MAR-1995; 95WO-US003316.
PR      07-JUN-1995; 95US-00487033.
XX
PA      (MYRI-) MYRIAD GENETICS INC.
XX
PI      Jiang P, Kamb A, Stone S;
XX
DR      WPI; 1999-044585/04.
XX
PT      Mouse multiple tumour suppressor gene segment - useful for primer design.
XX
PS      Example 13; Col 53; 80bp; English.
XX
CC      Oligonucleotides AAV70607-11 were used to isolate nucleic acid encoding a
CC      murine multiple tumour suppressor 1E1-beta (MST1E1-beta) protein. Primers
CC      designed from the gene can be used to design primers to detect
CC      abnormalities i.e. polymorphisms which may predispose towards
CC      malignancies such as melanoma, leukaemia, astrocytoma, lymphoma, glioma,
CC      as well as tumours of e.g. the breast, thyroid, pancreas, uterus and
CC      kidneys. (Updated on 20-MAR-2003 to correct PR field.) (Updated on 20-MAR-
CC      -2003 to correct PR field.)
XX
SQ      Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      505 GAGGGCTACTGGAGAACT 524
      ||||| ||||| |||||
DB      20 GAAGGCTTCTCGACACGCT 1

RESULT 1767
AAZ02575
ID      AAZ02575 standard; DNA; 20 BP.
XX
AC      AAZ02575;
XX
DT      07-OCT-1999 (first entry)
XX
DE      PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW      Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;

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KW      nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW      Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
OS      Synthetic.
XX
PA      Chlamydia trachomatis.
XX
PN      WO9928475-A2.
XX
PD      10-JUN-1999.
XX
PF      27-NOV-1998; 98WO-IB001939.
XX
PR      28-NOV-1997; 97FR-00015041.
PR      17-DEC-1997; 97FR-00016034.
PR      04-NOV-1998; 98US-0107077P.
XX
PA      (GIST ) GENSET.
XX
PI      Griffais R;
XX
DR      WPI; 1999-371125/31.
XX
PT      Genome sequence of Chlamydia trachomatis.
XX
PS      Disclosure; Page 1536; 1755pp; English.
XX
CC      PCR primers AAZ01426-206209 were used to amplify open reading frames
CC      (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC      encode polypeptides (see AAY56754-Y37949) which can be used as vaccines
CC      against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC      be used to control growth of the microorganism. Chlamydia trachomatis is
CC      responsible for a large number of diseases, e.g. eye diseases such as
CC      conjunctivitis; genital diseases such as nongonococcal urethritis,
CC      epididymitis, cervicitis, salpingitis, perihhepatitis, Bartholinitis;
CC      pneumonia; in breast feeding infants; and venereal lymphogranulomatosis.
CC      The polypeptides of the invention may be of use in treating these
CC      diseases
XX
SQ      Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1387 CTCCTCACCAAGCTGTGCA 1406
      ||||| ||||| |||||
DB      1 CTCGAAACAAAGCTGTCCA 20

RESULT 1768
AAZ01495
ID      AAZ01495 standard; DNA; 20 BP.
XX
AC      AAZ01495;
XX
DT      07-OCT-1999 (first entry)
XX
DE      PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW      Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW      paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW      nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW      Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
OS      Synthetic.
OS      Chlamydia trachomatis.
XX
PN      WO9928475-A2.
XX
PD      10-JUN-1999.
XX
PF      27-NOV-1998; 98WO-IB001939.

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XX 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
PA (GENSET ) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
PT
PS Disclosure; Page 1447; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conjunctivitis, genital diseases such as nongonococcal urethritis,
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;
CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
CC
XX
SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 87 CGGCTCTGAGGTGCTCGCG 106
DB 1 CTGCTTGAGGTTGATCTCG 20
XX
XX RESULT 1769
XX AAZ05818/c
XX ID AAZ05818 standard; DNA; 20 BP.
XX
XX AAZ05818;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nongonococcal urethritis;
XX paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
XX OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX 17-DEC-1997; 97FR-00016034.
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GENSET ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
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```
PT Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1802; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conjunctivitis, genital diseases such as nongonococcal urethritis,
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;
CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
CC
XX
SQ Sequence 20 BP; 2 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1636 AGGACGCCGCTGAGGAGTG 1655
DB 20 AGGAGAGCGCGGAGTGATG 1
XX
XX RESULT 1770
XX AAZ02583/c
XX ID AAZ02583 standard; DNA; 20 BP.
XX
XX AAZ02583;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nongonococcal urethritis;
XX paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
XX OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX 17-DEC-1997; 97FR-00016034.
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GENSET ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1536; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conjunctivitis, genital diseases such as nongonococcal urethritis,
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;
CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
CC
```

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CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 9 A; 7 C; 3 G; 1 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 283 GGGGACTCGTCTGCACG 302  
Db 20 GGGGATCTTCGTTGTTCG 1  
RESULT 1771  
AAK00531/C  
ID AAK00531 standard; DNA; 20 BP.  
XX  
AC AAK00531;  
XX  
DT 30-MAR-1999 (first entry)  
XX  
DE Antisense oligonucleotide ISIS#1939 targeted to ICM-1.  
XX  
KW Target; antisense; selective rank; inhibition; ranking; stability;  
KW interaction; intercellular adhesion molecule; ICM; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT 1..20  
FT misc_feature /*tag= a  
FT /note= "contains phosphorothioate internucleotide  
FT linkages"  
XX  
XX US5856103-A.  
XX  
XX 05-JAN-1999.  
XX  
XX 03-MAR-1997; 97US-00808474.  
XX  
XX 07-OCT-1994; 94US-00320507.  
XX  
XX (TEXA ) UNIV TEXAS.  
XX  
XX Clark CL, Gray DM;  
XX  
XX WPI; 1999-105098/09.  
XX  
PT Selectively ranking nucleic acid molecules, for inhibitory efficiency -  
PT comprises determining the fraction a set of nearest-neighbour nucleic  
PT acid base pair types in a target sequence zone, substituting nearest-  
PT neighbour nucleic acid base pair fractions to determine the fractions and  
PT multiplying.  
XX  
XX Example 1; Col 21-22; 72pp; English.  
XX  
CC This oligonucleotide represents an antisense oligonucleotides (ASO)  
CC targeted to a region in the intercellular adhesion molecule (ICAM)-1 gene  
CC which is generated by a method of selectively ranking nucleic acid  
CC molecules for inhibitory efficiency. The method comprises: (a)  
CC determining the fraction of each of a set of 13 nearest-neighbour nucleic  
CC acid base pair types in a target sequence zone RNA:ASO-DNA hybrid nucleic  
CC acid sequence; (b) substituting nearest-neighbour nucleic acid base pair  
CC fractions into formulas to determine the fractions of each of a series of  
CC 13 nearest-neighbour nucleic acid base pair types to provide determined  
CC fractions; and (c) multiplying the fractions of the 13 nearest-neighbour  
CC nucleic acid base pair types by a stability ranking to the nucleic acid  
CC antisense sequence; where the results are ordered to produce a ranking.  
CC The process is used to rank nucleic acid sequences based on the stability
```

```
CC of nucleic acid oligomer binding interactions to select sequence zones  
CC for antisense targeting  
XX  
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 226 GAGAGTGATGTTGTGGCGG 245  
Db 20 GAGAGGGAGAGTGATGTTGTGG 1  
RESULT 1772  
AAK21345  
ID AAK21345 standard; DNA; 20 BP.  
XX  
AC AAK21345;  
XX  
DT 21-MAY-1999 (first entry)  
XX  
DE Primer #2 for amplifying apolipoprotein E gene.  
XX  
KW Primer; PCR; amplification; apolipoprotein E; human; brain; diagnosis;  
KW Alzheimer's disease; mutation; gene expression; polymorphism; promoter;  
KW allele; heterozygote; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX WC9901574-A1.  
XX  
XX 14-JAN-1999.  
XX  
XX 30-JUN-1998; 98WO-FR001394.  
XX  
XX 01-JUL-1997; 97FR-00008284.  
XX  
XX (INSP ) INST PASTEUR LITTE.  
XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
XX  
XX Charrier-Harlin M, Lambert J, Amouyel P;  
XX  
XX WPI; 1999-106073/09.  
XX  
PT Diagnosing Alzheimer's disease - by detecting mutations in the regulatory  
PT region of the apo E gene, or levels of apo E allele expression.  
XX  
XX Example 3; Page 18; 48pp; French.  
XX  
CC Primers AAK21344-X21345 were used to PCR amplify a 375 bp fragment of the  
CC apolipoprotein E gene. The invention relates to the diagnosis of  
CC Alzheimer's disease (AD) by detecting one or more mutations, in the  
CC genomic region that regulates expression of the apolipoprotein E (apo E),  
CC that results in: (a) altered gene expression relative to a control  
CC population, or (b) altered relative expression of the alleles of apo E.  
CC Alternatively AD is detected by determining the levels of epsilon-2, -3  
CC or -4 alleles or mutations in the Th1/E47cs sequence (a polymorphism in  
CC the promoter region). The T allele of Th1/E47cs is associated with  
CC increased risk of AD (independently of the effect of the epsilon 4  
CC allele) and increases the risk associated with epsilon 4 in epsilon  
CC 4/epsilon 3 heterozygotes  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 699 ACTCAAGAGATCAGACTGG 718  
Db 1 ACTCAAGATCCGACTTG 20
```


| | | |
|---|---|---------------|
| DT | 14-JUN-1999 | (first entry) |
| XX | | |
| DE | Tumour necrosis factor alpha antisense oligonucleotide. | |
| XX | | |
| KM | Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO; | |
| KW | inhibition; expression; treatment; disease; disorder; ss. | |
| OS | Synthetic. | |
| XX | | |
| OS | Homo sapiens. | |
| XX | | |
| PN | MO9901139-A1. | |
| PD | 14-JAN-1999. | |
| XX | | |
| PF | 02-JUL-1998; 98MO-US013711. | |
| XX | | |
| PR | 03-JUL-1997; 97US-0051705P. | |
| XX | | |
| PA | (UYTE-) UNITV JEFFERSON THOMAS. | |
| XX | | |
| PI | Tu G, Israel Y; | |
| XX | | |
| DR | WPI: 1999-105767/09. | |
| XX | | |
| PT | Generation of antisense oligonucleotides - by specifically targeting a | |
| PT | GGGA motif found in mRNA sequences. | |
| XX | | |
| PS | Example 2; Page 37; 55pp; English. | |
| XX | | |
| CC | Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor- | |
| CC | alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50 | |
| CC | nucleotides, 90% of which are complementary to a region of mRNA | |
| CC | containing a GGGA sequence motif. The ASO is used to inhibit expression | |
| CC | of a gene in an animal and for treating the animal when afflicted with a | |
| CC | disease or disorder characterised by the presence of an mRNA from a gene | |
| CC | containing a GGGA motif. The ASO are specifically targeted to a GGGA | |
| CC | sequence motif found in mRNA from a gene. A study of known ASO has shown | |
| CC | that at least half of the most efficacious ASO's contain one or more TCCC | |
| CC | motifs. This ASO comprises a TCCC motif followed by a cytosine residue | |
| CC | and corresponds to a region of the human ICAM-1 3' untranslated region | |
| XX | | |
| SO | Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other; | |
| XX | | |
| Query Match | 0.8%; Score 13.6; DB 1; | Length 20; |
| Best Local Similarity | 80.0%; Pred No. 1.1e+03; | |
| Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0; | | |
| OY | 226 GAGAGTGTGTGTGTGTGGCGG 245 | |
| | | |
| DB | 20 GAGAGCGGAGAGTGTGTGGGG 1 | |
| RESULT 1776 | | |
| ID | AA95935 standard; DNA; 20 BP. | |
| XX | | |
| XX | AA95935; | |
| XX | | |
| DT | 13-SEP-1999 (first entry) | |
| XX | | |
| DE | PCR primer used to amplify an ORF of Chlamydia pneumoniae. | |
| XX | | |
| KM | Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; | |
| KW | sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; | |
| XX | neutralising epitope; PCR primer; ss. | |
| XX | | |
| OS | Synthetic. | |
| XX | | |
| OS | Chlamydia pneumoniae. | |
| XX | | |
| PN | WO9927105-A2. | |
| XX | | |
| PD | 03-JUN-1999. | |

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PF 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
PA
XX Griffiths R;
PI
XX MPI, 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
PT
XX Page 1787; Disclosure; 1912p; English.
PS
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584-AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
CC
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred.No.1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 953 GCCACGGGCGAGAGTGCTA 972
Db 1 GCTATCGGCGAGATGATGCTA 20
||| ||||| |||||
||| ||||| |||||

RESULT 1777
AAX92771/C
ID AAX92771 standard; DNA; 20 BP.
XX
XX AAX92771;
XX
XX 13-SEP-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
DE
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydoiphila pneumoniae.
XX
XX MO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffiths R;
XX
XX MPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1537; Disclosure; 1912p; English.
XX

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XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX

SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 405 GTCTCCAGTGAAGTGCCTA 424
Db 20 GTCTCTATGAGATTGCGGA 1

RESULT 1778
AAX94323/c
ID AAX94323 standard; DNA; 20 BP.
XX AAX94323;
XX
XX 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
XX
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (BEST) GENSET.
XX
XX Griffiths R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1661; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotide sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
SQ Sequence 20 BP; 9 A; 0 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1684 TACATCTTCCCTGCTTACTC 1703
Db 20 TACTTCTTCCCTCCTTCTC 1

RESULT 1779
AAX94068/c
ID AAX94068 standard; DNA; 20 BP.
XX AAX94068;
XX
XX 13-SEP-1999 (first entry)
XX
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
XX
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (BEST) GENSET.
XX
XX Griffiths R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1641; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotide sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 154 CTGTCAATGACACTCCGAGG 173
Db 20 CTGTGATTACACACCGAGG 1

RESULT 1780
AAX96741
ID AAX96741 standard; DNA; 20 BP.
XX

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AC AAX96741;
XX
XX 13-SEP-1999 (first entry)
DT
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydia pneumoniae.
XX
XX WO927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffiths R;
PI
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1849; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990) . C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions.
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 761 CCTGCTCAAGACCTCAA 780
XX | | | | | | | | | | | | | |
XX 1 CGCTGCTCAAGAACATCAGA 20
XX
XX RESULT 1781
XX AAX9621/c
XX ID AAX96621 standard; DNA; 20 BP.
XX
XX AAX96621;
XX
XX 13-SEP-1999 (first entry)
DT
XX
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydia pneumoniae.
XX
XX WO927105-A2.
XX

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```

XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffiths R;
PI
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1840; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990) . C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions.
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
XX SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 542 TCCTTGACAGCCCTCAGC 561
XX | | | | | | | | | | | | | |
XX 20 TATTTGTCAGCCCAACACC 1
XX
XX RESULT 1782
XX AAX95259
XX ID AAX95259 standard; DNA; 20 BP.
XX
XX AAX95259;
XX
XX 13-SEP-1999 (first entry)
DT
XX
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydia pneumoniae.
XX
XX WO927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffiths R;
PI
XX
XX WPI; 1999-357842/30.
XX

```

PT Genome sequence of Chlamydia pneumoniae.
XX Page 1734; Disclosure, 1912pp; English.
PS
XX
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584 - AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
CC
SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 9 GCGTAAAGATGACAGGAA 28
Db 1 GCGTCAAGATCTACAGGAA 20
RESULT 1783
AAA08858
ID AAA08858 standard; DNA; 20 BP.
XX
AC AAA08858;
XX
DT 01-AUG-2000 (first entry)
XX
DE 3' RACE nested primer for murine DKR-3 cDNA synthesis.
XX
KM DKR-3; human rig-like 7-1 mRNA, chicken lens fiber protein; cleft 4;
KM dkk-1; dickkopf-1; antagonist; wnt-8 signaling; morphogenesis; primer;
KM growth factor; cyostatic; sonic hedgehog; tissue differentiation; ss.
XX
OS Synthetic.
OS Mus sp.
EN WO200018914-A2.
XX
PD 06-APR-2000.
XX
PF 17-SEP-1999; 99WO-US021647.
XX
PR 25-SEP-1998; 98US-00161241.
XX
PA (AMGE-) AMGEN INC.
XX
PI Bass MB, Sullivan JK, Theill LE, Wang D;
XX
DR WPI: 2000-293153/25.
XX
PT New nucleic acid molecule encoding a biologically active DKR polypeptide,
PT useful in treatment of cancer, e.g. mammary tumors and stem cell tumors.
XX
PS Example 1; Page 53; 143pp; English.
XX
CC AAA08849-60 are oligonucleotide primers and adaptors used in cloning the
CC murine DKR-3 gene (AAA08838). The murine DKR-3 open reading frame has
CC homology to human rig-like 7-1 mRNA and to chicken lens fiber protein
CC cleft 4 gene. DKR-1 is a human ortholog of dkk-1 (dickkopf-1), a novel
CC gene identified in Xenopus and mouse, purportedly an antagonist of wnt-8
CC signaling. DKR-2, -3 and -4 are each related to DKR-1 by their cysteine
CC pattern. DKK-1 is also involved in morphogenesis in the developing
CC embryo, and therefore a growth factor, by inference DKR polypeptides are
CC also growth factors. The DKR polypeptides are useful for treating cancer,
CC e.g. mammary tumors, stem cell tumors, or other cancers in which the wnt

CC and/or sonic hedgehog (shh) signal transduction pathways are activated.
CC They can also be used to enhance tissue differentiation, such as bone
CC formation and hematopoietic cell formation
XX
SQ Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1633 AGCAGCGACGCGCTCGAGGG 1652
Db 1 AACATGCAAGCGCGCTCGAGGG 20
RESULT 1784
AAA95656/C
ID AAA95656 standard; DNA; 20 BP.
XX
AC AAA95656;
XX
DT 14-FEB-2001 (first entry)
XX
DE Mouse Pl6 gene primer #1.
XX
KM Cyostatic; human; multiple tumour suppressor 2; MTS2; diagnostic;
KM cancer; gene therapy; protein replacement therapy; ss; mouse.
XX
OS Mus sp.
XX
PN US6090578-A.
XX
PD 18-JUL-2000.
XX
PF 08-DEC-1997; 97US-00986515.
XX
PR 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95WO-US003316.
PR 07-JUN-1995; 95US-00480810.
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX
PI Kamb A;
XX
DR WPI: 2000-514036/46.
XX
PT Novel protein composition useful in protein replacement therapy for
PT diagnosing and treating cancer comprises a specific weight percent of
PT human multiple tumor suppressor 1 polypeptide.
XX
PS Example 12; Col 51; 72pp; English.
XX
CC The invention relates to the isolation of the gene encoding the human
CC multiple tumour suppressor 1 (MTS1) (AAA95633). The MTS1 protein has a
CC cyostatic activity and is used in protein replacement therapy. This
CC sequence is a PCR primer used to isolate the mouse pl6 gene (a homologue
CC of the MTS1 gene). MTS1 is useful in diagnosing human cancers such as
CC (ocular) melanoma, leukemia, astrocytoma, glioblastoma, lymphoma, glioma,
CC Hodgkin's lymphoma, multiple myeloma, sarcoma, myosarcoma,
CC cholangiocarcinoma, squamous cell carcinoma, CLL, and cancers of
CC pancreas, breast, stomach, brain, prostate, bladder, thyroid, ovary,
CC uterus, testis, kidney, colon and rectum. The MTS1 gene and protein is
CC useful in gene therapy, protein replacement therapy and protein mimetic
CC studies
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;


```

AAZ39994/C
ID AAZ39994 standard; DNA; 20 BP.
XX
AC AAZ39994;
XX
DT 11-FEB-2000 (first entry)
XX
DE PCR primer for human MTS1E1beta 1 coding sequence.
XX
KW Multiple tumour suppressor; MTS2; human; diagnosis; Hodgkin's lymphoma;
KW cancer predisposition; melanoma; leukaemia; lymphoma; glioma; MTS1E1beta;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5994095-A.
XX
PD 30-NOV-1999.
XX
PE 07-JUN-1995; 95US-00486047.
XX
PR 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95WO-US003316.
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX
PI Kamb A;
XX
DR WPI; 2000-038259/03.
XX
PT Multiple tumor suppressor cDNA, useful for diagnosing or determining a
PT predisposition to cancer.
XX
PS Example 12; Col 50; 72pp; English.
XX
CC This sequence represents a PCR primer for the human multiple tumour
CC suppressor 1E1beta (MTS1E1beta) coding sequence. The invention relates to
CC the human MTS2 DNA and protein sequences. The DNA sequences are useful
CC for diagnosing or determining a predisposition to cancers e.g. melanoma,
CC leukaemia, lymphoma, glioma, Hodgkin's lymphoma and cancers of the
CC pancreas, breast, thyroid, ovary, kidney, uterus and stomach
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 505 GAGGGCTACCTGGAGAGCT 524
DB |||||||
20 GAAAGCTTCTCGACACGCT 1

RESULT 1790
AAZ398298
ID AAZ98298 standard; DNA; 20 BP.
XX
AC AAZ98298;
XX
DT 13-JUN-2000 (first entry)
XX
DE Plasmodium DBL family conserved motif isolating primer UNIRBP5A.
XX
KW DBL gene; Duffy-binding like gene; ebl-1; Duffy Antigen Binding Protein;
KW DABP; Sialic Acid Binding Protein; SAbP; malaria; vaccine; immunisation;
KW protozoa; eba-175; PCR primer; ss.
XX
PA Plasmodium sp.
OS

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```

XX
PN US5993827-A.
XX
PD 30-NOV-1999.
XX
PE 07-JUN-1995; 95US-00487826.
XX
PR 10-SEP-1993; 93US-00119677.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Sim KL, Chitnis C, Peterson DS, Su X, Wellems TE, Miller LH;
XX
DR WPI; 2000-194198/17.
XX
PT Isolated protein binding domains from Plasmodium vivax and Plasmodium
PT falciparum erythrocyte binding proteins useful for vaccinating against
PT malaria.
XX
PS Example; Fig 3; 93pp; English.
XX
CC The invention relates to ebl-1 polypeptides that are encoded by the DBL
CC (Duffy-binding like) gene family. The ebl-1 proteins are substantially
CC identical to the Duffy Antigen Binding Protein (DABP) and Sialic Acid
CC Binding Protein (SABP), which are soluble proteins that appear in the
CC culture supernatant after erythrocytes infected with malaria release
CC merozoites. Immunochemical studies indicate that DABP and SABP are the
CC respective ligands for Plasmodium vivax and Plasmodium falciparum Duffy
CC and sialic acid receptors on erythrocytes. The ebl-1 polypeptides may be
CC used to vaccinate against malaria, especially caused by P. falciparum.
CC Immunization with the polypeptide provides effective protection against
CC malaria. Sequences AAZ98297-304 represent primers used for isolating
CC sequences encoding the conserved motifs of the DBL family
XX
SQ Sequence 20 BP; 2 A; 4 C; 5 G; 2 T; 0 U; 7 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 55.6%; Pred. No. 1.1e+03;
Matches 10; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

QY 1630 CCCAGCAGCAGCGGCTG 1647
DB ||:::|::|::|:
1 CCSMGSMGSCAGCAGGYS 18

RESULT 1791
AAZ48638/C
ID AAZ48638 standard; DNA; 20 BP.
XX
AC AAZ48638;
XX
DT 07-MAR-2000 (first entry)
XX
DE ICAM-1 antisense inhibitor, ISIS-1939.
XX
KW Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
KW expression modulator; cellular adhesion protein; malignant melanoma;
KW cellular proliferation modification; toxic epidermal necrolysis;
KW psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
KW pulmonary fibrosis; Lyme disease; infection; therapy; ICAM-1; ss.
XX
OS Synthetic.
XX
PN WO960167-A1.
XX
PD 25-NOV-1999.
XX
PE 20-MAY-1999; 99WO-US011142.
XX
PR 21-MAY-1998; 98US-00082336.
XX
PA (ISIS-) ISIS PHARM INC.
OS

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PR 12-APR-1999; 99US-00290640.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dean NM, Marcusson EG;
XX
XX WPI: 2000-628395/60.
XX
XX Antisense oligonucleotides for treating hepatitis and colon, liver or
XX lung cancer are inhibitors of Fas, Fas ligand or Fas associated protein 1
XX (Fap-1) expression.
XX
XX Example 3; Page 49; 116pp; English.
XX
XX AA61821-39 represent antisense oligonucleotides which are directed
XX against nucleic acids encoding human Fas ligand. The specification
XX describes antisense compounds which are targeted to the 5'-untranslated
XX region, translational start site, translational termination region or 3'-
XX untranslated region of nucleic acid molecules encoding Fas, Fas ligand
XX (FasL), or Fap-1 (Fas associated protein 1, protein tyrosine
XX phosphatase). The antisense compounds are used to inhibit the expression
XX of Fas, FasL or Fap-1 in cells or tissues. They are used to treat
XX autoimmune or inflammatory diseases such as hepatitis. They can also be
XX used to treat cancer, especially colon, liver or lung cancer or lymphoma
XX
SQ Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1659 CACCCCTCACAGGCGAGCCC 1678
Db 1 CCTCTTCACATGCGAGCCC 20

RESULT 1794
AA277261/C
ID AA277261 standard; DNA; 20 BP.
AC AA277261;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker downstream amplification primer SEQ ID NO:11617.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI: 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
PS Claim 9; Page 2707; 2745pp; English.

XX
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Composition and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
SQ Sequence 20 BP; 9 A; 0 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1237 CACTTCATCTTCGATCTT 1256
Db 20 CTCTCCCTTCATATCTT 1

RESULT 1795
AA514488
ID AA514488 standard; DNA; 20 BP.
AC AA514488;
XX
XX 06-JUN-2002 (first entry)
XX
XX Primer #13 in invention relating to von Willebrand factor.
XX
XX Von Willebrand factor; primer; ss.
XX
XX Unidentified.
XX
XX KR99066382-A.
XX
XX 16-AUG-1999.
XX
XX 24-JAN-1998; 98KR-00002265.
XX
XX 24-JAN-1998; 98KR-00002265.
XX
XX (GREC) KOREA GREEN CROSS CORP.
XX
XX
XX Kim HC, Kim JS, Byun TH, Lee JS, Oh HG, Lee JM, Kim BJ;
XX
XX WPI: 2000-547436/50.
XX
XX Method for purifying factor VIII using chimera antibody to von Willebrand
XX factor.
XX
XX Disclosure; Page 4; 12pp; Korean.
XX
XX The present invention relates to von Willebrand factor. The present
XX sequence represents a primer used in the methods of the present invention
XX
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 3 T; 0 U; 4 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 65.0%; Pred. No. 1.1e+03;
Matches 13; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 140 AGATCAACGCGAGCTGCTCA 159
Db 1 AGGISMARCTGCGAGSAGTCA 20

```

RESULT 1796
AA09667/c
ID AAA09667 standard; DNA; 20 BP.
XX
XX AAA09667;
XX
XX 30-JAN-2001 (first entry)
XX
XX Human SHP-1 antisense oligonucleotide SEQ ID 31.
XX
XX Human; SHP-1; Src homology region 2-domain phosphatase; phosphorothioate;
XX cytosolic tyrosine phosphatase; antisense oligonucleotide; cancer;
XX leukaemia; inflammation; infection; ss.
XX
XX Homo sapiens.
XX
XX OS
XX US6121047-A.
XX
XX 19-SEP-2000.
XX
XX 21-JUL-1999; 99US-00358685.
XX
XX 21-JUL-1999; 99US-00358685.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowseert LM;
XX
XX WPI; 2000-593714/56.
XX
XX Novel antisense oligonucleotides for modulating the expression of human
XX SHP-1, especially for treating a disease or condition associated with SHP
XX -1 expression, e.g. cancer.
XX
XX Claim 3; Col 41; 33pp; English.
XX
XX The invention relates to antisense oligonucleotides which modulate the
XX expression of human SHP-1 (Src homology region 2-domain phosphatase) a
XX cytosolic tyrosine phosphatase. The invention includes antisense
XX molecules AA09664-09683 which have modified phosphorothioate
XX internucleoside linkages which target various regions of the SHP-1 gene.
XX The oligonucleotides inhibit the expression of human SHP-1 in cells or
XX tissues, and may be used to treat diseases or conditions associated with
XX SHP-1 expression e.g. cancers, specifically leukaemia
XX
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 210 GCAGATAGGCGCTGATGAGA 229
XX ||| ||||| |||||
XX 20 GCTGCTAGGCGCTGATGAGA 1
XX
XX RESULT 1797
XX AAA63936/c
XX ID AAA63936 standard; DNA; 20 BP.
XX
XX AAA63936;
XX
XX 04-DEC-2000 (first entry)
XX
XX PCR primer for murine cDNA encoding an AGP-3 polypeptide.
XX
XX AGP-3; tumour necrosis factor ligand; TNF ligand; Crohn's disease;
XX type II transmembrane protein; B cell stimulatory factor;
XX inflammatory disorder; immune disorder; rheumatoid arthritis;
XX lupus and graft versus host disease; PCR primer; ss.
XX

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OS Mus sp.
XX
XX MO200047740-A2.
XX
XX 17-AUG-2000.
XX
XX 11-FEB-2000; 2000WO-US003653.
XX
XX 12-FEB-1999; 99US-011906P.
XX
XX 18-NOV-1999; 99US-0166271P.
XX
XX (AMGE-) AMGEN INC.
XX
XX Boyle WJ, Hsu H;
XX
XX WPI; 2000-558217/51.
XX
XX Novel polypeptides comprising tumor necrosis factor ligand family
XX proteins, useful for treating inflammatory and immune disorders, e.g.
XX rheumatoid arthritis.
XX
XX Disclosure; Page 36; 71pp; English.
XX
XX PCR primers AAA63936-37 were used to amplify cDNA encoding a murine AGP-3
XX polypeptide. AGP-3 is a tumour necrosis factor (TNF) ligand family
XX member. AGP-3 is a type II transmembrane protein, and is a potent B cell
XX stimulatory factor. Expression of AGP-3 correlates to increases in the
XX number of B cells and immunoglobulins produced. AGP-3 proteins,
XX antibodies, and nucleic acids may be used to treat inflammatory and
XX immune disorders, e.g. rheumatoid arthritis, Crohn's disease, lupus and
XX graft versus host disease. The nucleic acids may be used to regulate the
XX expression of an AGP-3 related protein. The AGP-3 proteins, antibodies
XX and nucleic acids are also useful for the detection of AGP-3 agonists,
XX antagonists and characterizing interactions with AGP-3 related proteins
XX
XX Sequence 20 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 916 CTGTTCTGTTCTCACTGCT 935
XX ||||| ||||| |||||
XX 20 CTGTTCTGTTCTGCGCGGCT 1
XX
XX RESULT 1798
XX AA249337/c
XX ID AA249337 standard; DNA; 20 BP.
XX
XX AA249337;
XX
XX 14-MAR-2000 (first entry)
XX
XX ICAM-1 targeted phosphorothioate oligonucleotide ISIS 1939.
XX
XX ICAM-1; cellular adhesion; expression; modulation; antisense;
XX non-parenteral; delivery; uptake; administration; emulsion;
XX ulcerative colitis; Crohn's disease; inflammatory bowel disease;
XX cellular proliferation; ss.
XX
XX Synthetic.
XX
XX OS
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /'tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages"
XX
XX WO960012-A1.
XX
XX 25-NOV-1999.
XX

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XX 20-MAY-1999; 99WO-US011394.
XX
XX 21-MAY-1998; 98US-00082624.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX WPI; 2000-072428/06.
XX
XX New oligonucleotide compositions used for the non-parenteral delivery of
XX e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular
XX decoys, external guide sequences or aptamers.
XX
XX Claim 80; Page 37; 133pp; English.
XX
XX Sequences AA249336-249343 and AA249390 represent antisense
XX oligonucleotides designed to modulate cellular adhesion. The invention
XX relates to new compositions for the non-parenteral delivery of
XX oligonucleotides comprising at least one oligonucleotide in an emulsion.
XX Oligonucleotides delivered via the compositions of the invention can be
XX used to modulate expression of a cellular adhesion protein, modulate a
XX rate of cellular proliferation, or have biological activity against
XX eukaryotic pathogens or retroviruses. They can be used for treating
XX conditions including e.g., ulcerative colitis, Crohn's disease,
XX inflammatory bowel disease or undue cellular proliferation. The
XX compositions can enhance the local and systemic uptake and delivery of
XX nucleic acids via non-parenteral routes of administration (e.g., via the
XX alimentary canal, skin, eyes, pulmonary tract, urethra or vagina)
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 226 GAGAGTGTGTGTGTGCGG 245
Db ||||| ||||| ||||| |||||
20 GAGAGGCGGAGAGTGTGTGCGG 1

RESULT 1799
AAZ44889/c
ID AAZ44889 standard; DNA; 20 BP.
XX
XX AAZ44889;
XX
XX 27-APR-2000 (first entry)
XX
XX Human K-ras PCR primer R6.
XX
XX Detection; primer extension; point mutation; pathogenicity; therapy;
XX cancer; genetic disease; K-ras; human; PCR primer; mutation; ss.
XX
XX Homo sapiens.
XX
XX US6013431-A.
XX
XX 11-JAN-2000.
XX
XX 02-DEC-1993; 93US-00162376.
XX
XX 16-FEB-1990; 90US-00482005.
XX
XX 15-FEB-1991; 91US-00656575.
XX
XX (MOLE-) MOLECULAR TOOL INC.
XX
XX Svanen A, Soederlund HE;
XX
XX WPI; 2000-146544/13.
XX
XX Identifying the nucleotide at specific position in a target sequence for
```

```
PT detecting disease-related point mutations involves extending a primer
PT that binds adjacent to the specific site to incorporate a labeled
PT deoxynucleotide.
XX
XX Example 7; Col 17-18; 14pp; English.
XX
XX This invention describes a novel method for determining the identity of a
XX specific nucleotide at one or more defined sites in a target nucleic acid
XX polymer involves formation of a detectable primer extension product if
XX the specific nucleotide is present at the defined site in the target
XX nucleic acid. The method is specifically used to detect point mutations
XX which are associated with altered pathogenicity or resistance to therapy
XX in a microorganism, particularly human immune deficiency virus or with
XX cancer or a genetic disease (or susceptibility to it) in humans, but more
XX generally can be used to detect mutations in RNA or DNA from animals,
XX plants or microorganisms. By selecting a primer that binds adjacent to
XX the specific site, variations at this site can be detected following
XX incorporation of only a single dNTP. The method requires only a few,
XX simple manipulations, making it suitable for routine use, and allows
XX quantification of the proportion of mutated cells in a mixed population,
XX down to 0.5% of this population. The method is easily automated. This
XX sequence represents a PCR primer used to detect a mutation in the human K
XX -ras gene
XX
XX Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1311 GACATACACTACCCCAAGT 1330
Db ||||| ||||| ||||| |||||
20 GAGCTCCCACTACCAAGT 1

RESULT 1800
AAZ89211/c
ID AAZ89211 standard; DNA; 20 BP.
XX
XX AAZ89211;
XX
XX 09-JUN-2000 (first entry)
XX
XX Human glyceraldehyde-3-phosphate dehydrogenase forward PCR primer.
XX
XX Human; expression profile; Three Prime End Amplification; TEA;
XX glyceraldehyde-3-phosphate dehydrogenase; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200008208-A2.
XX
XX 17-FEB-2000.
XX
XX 05-AUG-1999; 99WO-GB002579.
XX
XX 05-AUG-1998; 98GB-00017055.
XX
XX (MED-) MEDICAL RES COUNCIL.
XX
XX Freeman TC, Richardson PJ, Dixon AK;
XX
XX WPI; 2000-224033/19.
XX
XX Reverse transcription of mRNA species used for expression profiling of
XX single cells by employing a first heeled primer to provide first strand
XX cDNA species and then a second heeled primer population to generate
XX second strand cDNAs.
XX
XX Example 1; Page 29; 50pp; English.
XX
XX This invention describes a novel process (M1) of reverse transcribing
XX mRNA species present in a sample from an organism by: (a) reverse
```

transcribing the mRNA species using a first healed primer, to provide a first strand cDNA species; and (b) synthesizing second cDNA species using a second healed primer population, the nucleotide sequences of the non-healed portions of the second healed primers being such that the reverse transcribed first strand cDNA species are capable of hybridizing to at least one second primer. The processes can be used for expression profiling of single cells. The polynucleotide comprising an oligo d(T) sequence and a heel sequence 5' can be used for the reverse transcription of mRNA species in a sample. The polynucleotide primer population of claim (4) can be used for the synthesis of second strand cDNA from a population of first strand cDNA species. Single cell cDNA libraries can be made for subsequent detailed analysis of gene expression and the discovery of novel genes. Small samples can be used and allow the utilization of the large amount of sequence data available for further understanding of disease processes and the cellular physiology of complex issues. The invention provides a rapid, robust and reproducible procedure called Three Prime End Amplification (TPEA), optionally with PCR (TPBEA-PCR). Prior art methods for the analysis of gene expression within single cells or small tissue samples are limiting. Whilst in situ hybridization techniques provide detailed information about the cellular expression pattern of a gene in intact tissue the technique is laborious and unable to analyze multiple transcripts in a single preparation. The methods presented in the disclosure provide a more straightforward, reproducible and reliable cDNA amplification procedure for small mRNA samples where expression profiling can be conducted. The amplification technique can be carried out in a single tube with a need for only limited manual intervention and large numbers of samples can be analyzed. There is a bias towards more uniform length cDNA molecules ensuring that even relatively low abundance mRNA species are transcribed and optionally amplified at the same level of efficiency as more abundant mRNA species. AA289101-289253 represent the primers described in the method of the invention

| | | | | |
|--------------------------|--------|--------------------|-----------|------------|
| Query Match | 0.8% | Score 13.6; | DB 1; | Length 20; |
| Best Local Similarity | 80.0%; | Pred. No. 1.1e+03; | | |
| Matches 16; Conservative | 0; | Mismatches 4; | Indels 0; | Gaps 0; |

| | | | |
|----|-------|---------------------------------------|-------|
| QY | 6 2 1 | T A G C T G A C C A A C T G G C G | 6 4 0 |
| | | | |
| Db | 2 0 | T G A G C T T G A C C A A G T G T C G | 1 |

RESULT 1801
AAA11188/c
ID AAA11188 standard; DNA; 20 BP.

DT 11-OCT-2000 (first entry)

DE Mouse multiple tumour suppressor 1 Elbeta p16-specific reverse primer.

KW Variant; human; multiple tumour suppressor; MTS; mutation; melanoma;
KW cancer; diagnosis; PCR primer; ss.

OS Mus sp.

PN US6037462-A.

PD 14-MAR-2000.

22-JUL-1998: 98US-00120130.

18-MAR-1994: 94US-00214582

PR 18-MAR-1994: 94HS-00215087

PR 14-APR-1994; 94US-0022/369.
PB 01-JUN-1994; 94US-0025/938.

PR 17-MAR-1995; 95WFO-050033316.
07 JUN 1995 0515 00480810

XX

PA (MYRI-) MYRIAD GENETICS INC.

PI Kamb A;

DR WPI; 2000-269915/23.

PT New mutants of the human multiple tumor suppressor gene, useful as
PT diagnostic markers of cancer, contain specific base alterations or
PT deletions.

PS Example 12; Col 50; 72pp; English.

The invention relates to variants (AA11196-A11206) of the human multiple tumour suppressor 1 (MTS1) gene (AA11165). The variants have the following changes relative to this sequence: A at any of positions 265, 442, 330 and 329; T at any of positions 172, 228, 341 and 148 and deletions of nucleotides 290-234, 172-179 or 128-129. The variants are somatic mutations of MTS1, indicative of predisposition to melanoma and many other cancers, so detecting them is useful for diagnosis, prognosis and monitoring of cancer (including prenatal analysis). Cells and animals that express the variants are useful as model systems for identifying potential anticancer agents. This sequence represents a primer used to screen for the mouse MTS1 Etheca sequence

| | | | | |
|--------------------------|--------|--------------------|-----------|------------|
| Query Match | 0.8% | Score 13.6; | DB 1; | Length 20; |
| Best Local Similarity | 80.0%; | Pred. No. 1.1e+03; | | |
| Matches 16; Conservative | 0; | Mismatches 4; | Indels 0; | Gaps 0; |

Dy 505 GAGGGCTACCTGGAGAAGCT 524
|||
Dd 20 GAAGGCTTCTGTGACACGCT 1

RESULT 1802
AAZ48909/c
ID AAZ48909 standard; DNA; 20 BP.

DT 29-MAR-2000 (first entry)

Human ICAM-1 antisense inhibitor, ISIS #1939.

KM Antisense inhibitor; human; ICAM-1; intercellular adhesion molecule-1;
KM vascular cell adhesion molecule-1; hyperproliferative disorder; VCAM-1;
KM endothelial leukocyte adhesion molecule-1; ELAM-1; skin condition;
KM cancer; viral infection; tumour; dapsides; graft versus host disease;
KM arthritis; infection; autoimmune disorder; multiple sclerosis; stroke;
KM juvenile diabetes mellitus; arthritis; myasthenia gravis; therapy;
KM pneumophila vulgaris; systemic lupus erythematosus; acute myocarditis;
KM cardiovascular disorder; dilated cardiomyopathy; ischaemic heart disease;
KM ss.

OS Homo sapiens.

PN W09961462-A1

02-DEC-1999.

26-MAY-1999; 99WO-US011548.

27-MAY-1998: 98US-00085759.

PA (TSTS-) ISIS PHARM INC.

| | | | | | | |
|----|---------|----|-----------|----|-------|-----|
| AA | Bennett | CE | Mirahelli | CK | Baker | BE- |
| BT | | | | | | |

AA WPT: 2000-072600/06
DB

PT New antisense oligonucleotides, used for treating e.g. inflammatory conditions, psoriasis, graft rejection, cancers, infections,

PT cardiovascular disorders or autoimmune disorders.
XX
XX Example 10; Page 176; 199pp; English.
XX
CC This sequence is an antisense oligonucleotide of the invention. The
CC antisense oligonucleotides are targeted to a nucleic acid encoding a
CC cellular adhesion molecule (CAM) and is capable of modulating the
CC expression of the CAM. They particularly inhibit intercellular adhesion
CC molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), or
CC endothelial leukocyte adhesion molecule-1 (ELAM-1). The antisense
CC oligonucleotides can be used to modulate CAM activity in mediating
CC cell-cell interactions and subsequent cellular and biological responses,
CC e.g. T cell activation, leukocyte transmigration and inflammation. The
CC antisense sequences can be used for modulating the synthesis of a CAM.
CC They can be used for treating an animal suspected of having or being
CC prone to a disease or condition associated with a CAM. Oligonucleotides
CC targeted to ICAM-1 can be used for treating an inflammatory disease or
CC condition e.g. inflammatory bowel disease such as Crohn's disease,
CC colitis or ulcerative colitis, a condition of the skin, e.g. psoriasis or
CC cytotoxic dermatitis, rheumatoid arthritis, allograft rejection, cancer,
CC pneumonia, multiple sclerosis or a viral infection. The ICAM-1 sequences
CC can also be used for reducing corticosteroid use in a patient or for
CC reducing cyclosporine use in a patient. The oligonucleotides can also be
CC used for detection and diagnosis. They can also be used for treating e.g.
CC hyperproliferative disorders, tumours, diapedesis, graft versus host
CC disease, arthritis, infections, autoimmune disorders, e.g. autoimmune
CC thyroid disorders, autoimmune forms of arthritis, multiple sclerosis,
CC some forms of juvenile diabetes mellitus, myasthenia gravis, pemphigus
CC vulgaris, systemic lupus erythematosus, cardiovascular disorders,
CC myocardial ischaemia/reperfusion injury, dilated cardiomyopathy, acute
CC myocarditis, ischaemic heart disease or stroke
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGACTGCTGCTGCTGCGG 245
DB 20 GAGAGCGGAGAGTCTGCGGG 1
RESULT 1803
AAC68206
ID AAC68206 standard; DNA; 20 BP.
XX
AC AAC68206;
XX
DT 19-FEB-2001 (first entry)
XX
DE Gene typing PCR primer #1.
XX
KW Human leukocyte antigen; HLA; gene typing; infectious disease;
KW autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
XX Homo sapiens.
XX OS
XX CA2299675-A1.
PN
XX 12-SEP-2000.
PD
XX
XX 10-MAR-2000; 2000CA-02299675.
PF
XX 12-MAR-1999; 99US-0124113P.
PR
XX (UTMA-) UNIV MANITOBA.
PA
XX Luo M, Brunham RC, Pan Y, Brunham K;
PI
XX WPI; 2000-679930/67.
DR
XX
PT Typing polymorphic genes, useful to assess the association of alleles

PT with diseases and in disease diagnosis, uses a taxonomy based sequence
PT analysis in which a typing tree based on distinguishing sequences is
PT constructed.
XX
XX
XX Disclosure; Page 64; 125pp; English.
XX
XX The present invention provides a novel method for typing genes,
CC particularly human leukocyte antigen (HLA) coding sequences. The method
CC uses DNA sequences and a taxonomy-based sequence analysis method to
CC assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have
CC been linked to diseases such as diabetes, IGA deficiency, multiple
CC sclerosis, cancer, clinical and immunological manifestations of HIV
CC infection, coeliac disease, idiopathic nephrotic syndrome, immune
CC responses to parasite antigens, pemphigus vulgaris, inflammatory bowel
CC disease, rheumatoid arthritis, allergy and other inflammatory diseases
XX
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1427 TCTCCGCGAGAGATTCATG 1446
DB 1 TCCCGCGAGAGATTTCGTG 20
RESULT 1804
AAC6586
ID AAC6586 standard; DNA; 20 BP.
XX
AC AAC6586;
XX
DT 19-FEB-2001 (first entry)
XX
DE Gene typing PCR primer SEQ ID NO: 6.
XX
KW Human leukocyte antigen; HLA; gene typing; infectious disease;
KW autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
XX Homo sapiens.
XX OS
XX CA2299675-A1.
PN
XX 12-SEP-2000.
PD
XX 10-MAR-2000; 2000CA-02299675.
PF
XX 12-MAR-1999; 99US-0124113P.
PR
XX (UTMA-) UNIV MANITOBA.
PA
XX Luo M, Brunham RC, Pan Y, Brunham K;
PI
XX WPI; 2000-679930/67.
DR
XX
XX Typing polymorphic genes, useful to assess the association of alleles
PT with diseases and in disease diagnosis, uses a taxonomy based sequence
PT analysis in which a typing tree based on distinguishing sequences is
PT constructed.
XX
XX Claim 9; Page 93; 125pp; English.
XX
XX The present invention provides a novel method for typing genes,
CC particularly human leukocyte antigen (HLA) coding sequences. The method
CC uses DNA sequences and a taxonomy-based sequence analysis method to
CC assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have
CC been linked to diseases such as diabetes, IGA deficiency, multiple
CC sclerosis, cancer, clinical and immunological manifestations of HIV
CC infection, coeliac disease, idiopathic nephrotic syndrome, immune
CC responses to parasite antigens, pemphigus vulgaris, inflammatory bowel
CC disease, rheumatoid arthritis, allergy and other inflammatory diseases
XX

```
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1427 TCTCCGACAGAGATGCCATG 1446
DB 1 TCCCGCAGAGATTTCTG 20

RESULT 1805
AAA94747/C
ID AAA94747 standard; DNA; 20 BP.
XX
AC AAA94747;
DT 19-JAN-2001 (first entry)
XX
DE Oligonucleotide #1.
XX
KW VP22; gene therapy; tumour; psoriasis; eczema; skin cancer; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothiate deoxynucleotides.
FT Optionally labelled at 3' end with fluorescein or at 5'
FT end with biotin"
XX
PN WO200053722-A2.
XX
PD 14-SEP-2000.
XX
PF 10-MAR-2000; 2000WO-GB000897.
XX
PR 10-MAR-1999; 99GB-00005444.
XX
PR 24-DEC-1999; 99GB-00030499.
XX
PA (PHOG-) PHOGEN LTD.
XX
PI O'hare PFJ, Normand NM;
XX
DR WPI; 2000-594314/56.
XX
XX
XX Aggregated composition suitable for phototherapy or prophylaxis of
XX psoriasis, eczema or skin cancer and for delivering nucleic acids and
XX proteins into cells, comprises transport protein VP22 and an
XX oligonucleotide.
XX
PS Example 1; Page 11; 28pp; English.
XX
XX The present invention relates to an aggregated composition comprising a
XX polypeptide having the transport function of herpesviral transport
XX protein VP22. The aggregates can be useful for delivery of
XX oligonucleotides and proteins into cells. The present sequence is one
XX such oligonucleotide which may be delivered into cells using the method
XX of the present invention. The aggregated composition is useful for
XX preparing a medicament for therapy or prophylaxis of a disease and for
XX delivering molecules to cells in vitro. The aggregates are delivered to
XX target cells such as tumour cells in vivo and are useful for treating
XX psoriasis, eczema or skin cancer
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGGCG 245
```

```
DB 20 GAGAGCGGAGACTGTGTGGGCG 1
|||||
RESULT 1806
AAA73499/C
ID AAA73499 standard; DNA; 20 BP.
XX
AC AAA73499;
DT 28-NOV-2000 (first entry)
XX
DE Human c-raf kinase antisense oligonucleotide #11 (ISIS #5149).
XX
KW Human; c-raf; protein kinase; antisense oligonucleotide; cancer;
KW signal transduction; hyperplasia; pulmonary fibrosis; angiogenesis;
KW psoriasis; atherosclerosis; smooth muscle cell proliferation; stenosis;
KW restenosis; inflammatory disorder; tissue graft rejection;
KW endotoxin shock; glomerular nephritis; ss.
XX
OS Homo sapiens.
XX
PN US6090626-A.
XX
PD 18-JUL-2000.
XX
PF 28-AUG-1998; 98US-00143214.
XX
PR 31-MAY-1994; 94US-00250856.
XX
PR 31-MAY-1995; 95WO-05007111.
XX
PR 26-NOV-1996; 96US-00756806.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Boggs RT, Monia BP;
XX
DR WPI; 2000-531424/48.
XX
XX
XX Antisense oligonucleotides targeted to nucleic acid molecule encoding
XX human raf useful for diagnosis, treatment of raf-associated cell
XX proliferative conditions such as cancer, psoriasis or blood vessel
XX restenosis.
XX
PS Disclosure; Col 9; 31pp; English.
XX
XX c-raf is a serine-threonine-specific protein kinase and is thought to
XX play a fundamental role in signal transduction, and cell proliferation
XX control. The present sequence is an antisense oligonucleotide. This
XX sequence is targeted to human c-raf gene, resulting in c-raf expression
XX inhibition. The present sequence may be useful for treating and raf-
XX associated cell hyperproliferation conditions such as cancer,
XX hyperplasia, pulmonary fibrosis, angiogenesis, psoriasis,
XX atherosclerosis and smooth muscle cell proliferation in blood vessels
XX e.g. stenosis or restenosis following angioplasty. Also, the present
XX sequence may be useful for treating inflammatory disorders such as tissue
XX graft rejection, endotoxin shock and glomerular nephritis
XX
SQ Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1186 ATGGCCACAGCGCGTCCCT 1205
DB 20 ATGGCTCCAGGCTTCACCT 1
|||||
RESULT 1807
AAC60947/C
ID AAC60947 standard; DNA; 20 BP.
XX
AC AAC60947;
```

XX 13-FEB-2001 (first entry)
DT
XX
DE Interleukin 1 receptor antagonist short tandem repeat primer SEQ ID NO:7.
XX
XX Short tandem repeat; primer: 5NR; susceptibility: HIV; infection: AIDS;
XX detection, polymorphism; interleukin 10 promoter; IL-10;
XX chromosome position 2q12; interleukin 1 receptor antagonist; ss.
XX
XX Homo sapiens.
XX
XX MO200061811-A2.
XX
XX 19-OCT-2000.
XX
XX 06-APR-2000; 2000WO-US009355.
XX
XX 09-APR-1999; 99US-0128521P.
XX
XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Smith MM, Shin HD, O'Brien SJ;
XX
XX MPI, 2000-687051/67.
XX
XX Predicting susceptibility to HIV infection or progression useful for
PT selection of therapeutic treatment for persons infected with HIV virus,
PT comprises detecting polymorphism in human interleukin-10 promoter.
XX
XX Example 1; Page 11; 40pp; English.
XX
XX The present invention describes a method for predicting susceptibility to
CC HIV infection or HIV progression in a subject. The method involves
CC detecting a polymorphism in a human interleukin-10 (IL-10) promoter,
CC where the presence of the polymorphism indicates susceptibility to HIV
CC infection or HIV progression. The method provides prognostic information
CC to persons infected with HIV virus and is useful to help select
CC treatments (such as administration of IL-10 or gene therapy with IL-10).
CC The presence of polymorphism is useful as predictor that very aggressive
CC treatment could substantially eradicate the virus from the infected
CC person. The method is useful for the generation of normograms or other
CC predictive algorithms that can be used, in association with allele
CC status, to prognose probable survival or years to development of AIDS
CC following HIV seroconversion. It indicates that increased expression of
CC the IL-10 gene helps to reduce HIV-1 infection and pathogenic progression
CC and enables a variety of new therapeutic interventions in the treatment
CC of HIV disease. The present sequence represents a short tandem repeat
CC (STR) primer which is used in an example from the present invention
XX
XX Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1442 CCATGCAACATCCATCTTTC 1461
DB 20 CCATGCAACATCCATGATC 1
RESULT 1808
AAC83137
ID AAC83137 standard; DNA; 20 BP.
XX
XX AAC83137;
XX
XX 23-FEB-2001 (first entry)
DT
XX
XX Cell cycle regulatory gene related oligonucleotide SEQ ID 48.
DE
XX
XX Cell cycle regulation; corn; transgenic plant; cyclin; maize; soybean;
KW cyclin-dependent kinase; sunflower; sorghum; canola; wheat; alfalfa;
KW cotton; rice; barley; millet; ss.

XX Zea mays.
OS
XX
XX MO200065040-A2.
XX
XX 02-NOV-2000.
XX
XX 13-APR-2000; 2000WO-US009975.
XX
XX 22-APR-1999; 99US-0130849P.
XX
XX (PION-) PIONEER HI-BRED INT INC.
XX
XX Helentjaris TG, Habben JE, Sun Y;
XX
XX MPI, 2000-687333/67.
XX
XX Nucleic acids useful for producing transgenic plants, preferably maize,
PT with increased cell cycle gene activity, preferably activity of cyclin
PT and/or cyclin-dependent kinase.
XX
XX Disclosure; Page 118; 122pp; English.
XX
XX Polynucleotide sequences AAC83101 - AAC83113 encode proteins AAB35794 -
CC AAB35806 which are involved in regulating the cell cycle. The protein and
CC DNA sequences have been isolated from Zea mays (corn), and the invention
CC also includes oligonucleotides AAC83114 - AAC83119 which are related to
CC the cell cycle polynucleotides. The cell cycle polynucleotide sequences
CC are useful for producing transgenic plants such as maize, soybean,
CC sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley and
CC millet with increased levels of cell cycle gene activity, such as
CC activity of cyclin and cyclin-dependent kinases. The DNA sequences are
CC also useful as probes for detecting deficiencies in the level of mRNA in
CC screening for desired transgenic plants, for detecting mutations in the
CC gene, for monitoring upregulation of expression or changes in enzyme
CC activity in screening assays of compounds, for detecting any number of
CC allelic variants, orthologs or paralogues of the gene, and site-directed
CC mutagenesis in eukaryotic cells. The DNA sequences are also useful for
CC recombinant expression of the encoded polypeptides and as immunogens for
CC preparing and screening antibodies. A transgenic plant comprising an
CC expression cassette including a cell cycle regulatory gene is useful for
CC assaying enzyme agonists and antagonists, and as immunogens or antigens
CC to obtain antibodies. The antibodies are useful in assaying expression
CC levels of cell cycle regulatory proteins, for identifying and isolating
CC nucleic acids from expression libraries, for identifying homologues of
CC polypeptides from other species, and for purification of the proteins
XX
XX Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 279 TCCTGGGGGAACCTTGCTTCTG 298
DB 1 TCAAGGGGAAATGTTCTG 20
RESULT 1809
AAC79550/c
ID AAC79550 standard; DNA; 20 BP.
XX
XX AAC79550;
XX
XX 07-FEB-2001 (first entry)
DT
XX
XX Murine p38beta antisense oligonucleotide SEQ ID 75.
DE
XX
XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
KW antineumatic; antiarthritic; immunosuppressive; cardiac; heart disease;
KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
KW phosphorothioate; ss.

| | |
|--------------------------|---|
| DR | WPI, 2001-235416/25. |
| XX | |
| PT | Modulating bone resorption in human or animal for treating osteoporosis |
| PT | or Paget's disease, comprises administering leptin, its derivative, |
| PT | homologue, analog, chemical equivalent, antagonist or agonist. |
| XX | |
| PS | Disclosure; Page 23; 40pp; English. |
| CC | |
| CC | The present invention describes a method of modulating bone resorption |
| CC | comprising administering leptin or a derivative under conditions suitable |
| CC | for the modulation of osteoclastogenesis. This is useful in the treatment |
| CC | of osteoporosis and Paget's disease. No further information about this |
| CC | sequence is given in the specification |
| XX | |
| SQ | Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other; |
| | |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| Best Local Similarity | 80.0%; Pred. No. 1.1e+03; |
| Matches 16; Conservative | 0; Mismatches 4; Indels 0; Gaps 0; |
| | |
| QY | 122 CCATGATCGATGCAAGAAG 141 |
| | |
| Db | 20 CCTTGATCTGATGCAGTAG 1 |
| | |
| RESULT 1812 | |
| AAD14761 | |
| ID | AAD14761 standard; DNA; 20 BP. |
| XX | |
| AC | AAD14761; |
| XX | |
| DT | 01-NOV-2001 (first entry) |
| XX | |
| DE | Human glycogen synthase kinase 3 alpha antisense oligo ISIS #116602. |
| XX | |
| KW | Human; glycogen synthase kinase 3 alpha; antidiabetic; cyostatic; |
| KW | antisense therapy; diabetes; hyperproliferative disorder; inflammation; |
| KW | neurological disorder; tumour; haematopoietic disorder; infection; |
| KW | hyperproliferative disorder; developmental disorder; antisense; |
| KW | phosphorochiote backbone; ss. |
| XX | |
| OS | Homo sapiens. |
| OS | Synthetic. |
| XX | |
| FH | Key |
| FT | modified_base |
| FT | 1. .20 |
| FT | /*tag= a |
| FT | /mod_base= OTHER |
| FT | /note= "Phosphorochiote backbone" |
| FT | 1. .5 |
| FT | /*tag= b |
| FT | /mod_base= OTHER |
| FT | /note= "Methoxyethyl residues" |
| FT | 1 |
| FT | /*tag= d |
| FT | /mod_base= m5c |
| FT | 3 |
| FT | /*tag= e |
| FT | /mod_base= m5c |
| FT | 4 |
| FT | /*tag= f |
| FT | /mod_base= m5c |
| FT | 6 |
| FT | /*tag= g |
| FT | /mod_base= m5c |
| FT | 9 |
| FT | modified_base |
| FT | /*tag= h |
| FT | /mod_base= m5c |
| FT | 10 |
| FT | modified_base |
| FT | /*tag= i |
| FT | /mod_base= m5c |
| FT | 12 |
| FT | modified_base |
| FT | /*tag= j |

| | | |
|-------------|---|------------------------------------|
| FT | | /mod_base= m5c |
| FT | modified_base | 13 |
| FT | | /tag= k |
| FT | | /mod_base= m5c |
| FT | modified_base | 15 |
| FT | | /tag= l |
| FT | | /mod_base= m5c |
| FT | modified_base | 16..20 |
| FT | | /tag= c |
| FT | | /mod_base= OTHER |
| FT | | /note= "Methoxyethyl residues" |
| FT | modified_base | 16 |
| FT | | /tag= m |
| FT | | /mod_base= m5c |
| FT | modified_base | 18 |
| FT | | /tag= n |
| FT | | /mod_base= m5c |
| FT | modified_base | 19 |
| FT | | /tag= o |
| FT | | /mod_base= m5c |
| XX | | |
| PX | WO200152865-A1. | |
| XX | | |
| PD | 26-JUN-2001. | |
| XX | | |
| PF | 16-JAN-2001; 2001WO-US001411. | |
| XX | | |
| PR | 21-JAN-2000; 2000US-00488856. | |
| XX | | |
| PA | (ISIS-) ISIS PHARM INC. | |
| XX | | |
| PI | Monia BP, McKay R, Butler WM, Wyatt JR; | |
| XX | | |
| DR | WPI, 2001-442247/47. | |
| XX | | |
| PT | Antisense compound 8 to 30 nucleobases in length comprising a compound | |
| PT | that is targeted to a nucleic acid molecule encoding glycogen synthase | |
| PT | kinase 3 alpha, useful for the treatment of e.g. diabetes and | |
| PT | hyperproliferative disorders. | |
| XX | | |
| PX | Example 15; Page 82; 115pp; English. | |
| XX | | |
| CC | The invention relates to an antisense compound 8 to 30 nucleobases in | |
| CC | length targeted to a nucleic acid encoding glycogen synthase kinase 3 | |
| CC | alpha. The antisense compound specifically hybridises with and inhibits | |
| CC | the expression of glycogen synthase kinase 3 alpha. The antisense | |
| CC | compound is useful for the treatment of a diseases associated with | |
| CC | glycogen synthase kinase 3 alpha such as diabetes, a neurological | |
| CC | disorder, a haematopoietic disorder, a hyperproliferative disorder or a | |
| CC | developmental disorder. The antisense compounds may also be used | |
| CC | prophylactically to prevent or delay infection, inflammation or tumour | |
| CC | formation. The present sequence is a phosphorothioate antisense | |
| XX | oligonucleotide targeted to human glycogen synthase kinase 3 alpha DNA | |
| SQ | Sequence 20 BP; 0 A; 12 C; 4 G; 4 T; 0 U; 0 Other; | |
| OY | Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| | Best Local Similarity | 80.0%; Pred.No.1.le+03; |
| | Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0; | |
| DB | 556 CTCAGCGCGCGCTTCGTCG 575 | |
| | | |
| | 1 CTCCGCTGCCCTCCTCCGCCG 20 | |
| RESULT 1813 | | |
| ABA04587/C | | |
| ID | ABA04587 standard; DNA; 20 BP. | |
| XX | | |
| AC | ABA04587; | |
| XX | | |
| DT | 15-FEB-2002 (first entry) | |
| XX | | |


```
FT modified_base 16..20
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2' methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowsett LM;
XX
XX WPI, 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Example 18; Page 91; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 2 A; 3 C; 8 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 774 CCTCAACACGCCACATCG 793
Db 20 CCTGAACGACCAACATCG 1
RESULT 1818
AAS45704/C
ID AAS45704 standard; DNA; 20 BP.
XX
XX AAS45704;
XX
XX 18-DEC-2001 (first entry)
XX
XX Human PARP-2 antisense inhibitor ISIS #126144.
XX
XX Human; ss; PARP; Poly (ADP-ribose) polymerase; antisense oligonucleotide;
XX cytostatic; neurotropic; neuroprotective; antiinflammatory; antidiabetic;
XX immunosuppressant; hyperproliferative disorder; cancer; cellular injury;
XX oxidative stress; neurological disorder; parkinsonism; apoptosis;
XX meningitis-associated intracranial complication; ischemia; probe;
XX inflammatory disorder; autoimmune disorder; arthritis; diabetes.
XX
XX Homo sapiens.
XX
XX Key location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
```

```
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "All cytidine residues are 5-methyl cytidine"
XX
XX modified_base 1..5
XX /*tag= C
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl nucleotides"
XX
XX modified_base 16..20
XX /*tag= d
XX /mod_base= OTHER
XX /note= "2' methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowsett LM;
XX
XX WPI, 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Example 16; Page 86; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1055 AGTCAATCCCAACAAGCA 1074
Db 20 AGGCAATCTCAACAAGCCA 1
RESULT 1819
AAC92774/C
ID AAC92774 standard; DNA; 20 BP.
XX
XX AAC92774;
XX
XX 27-MAR-2001 (first entry)
XX
XX Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:46.
XX
XX Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX mRNA processing; transport; stabilisation; alternative splicing;
XX donor splice site selection; telomere biogenesis; oncogenesis;
XX apoptosis-associated protein; cancer; tumour formation;
XX expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
```

XX Homo sapiens.
OS
XX
XX US6165789-A.
PN
XX
XX 26-DEC-2000.
PD
XX
XX 27-OCT-1999; 99US-00428696.
PF
XX
XX 27-OCT-1999; 99US-00428696.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Monia BP, Cowsett LM;
PI
XX
XX WPI; 2001-090484/10.
DR
XX
XX
XX Novel antisense compound targeted to human hnRNP A1 which specifically
PT hybridizes with and inhibits the expression of human hnRNP A1, useful for
PT modulating the expression of hnRNP A1 in cells.
XX
XX
XX Example 15; Col 41-42; 38pp; English.
PS
XX
XX Sequences AAC92738-C92817 represent antisense oligonucleotides targeted
CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which
CC inhibit its expression. The antisense oligonucleotides were designed to
CC target different regions of the human hnRNP A1 mRNA, and were analysed
CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.
CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core
CC protein A1 and p40CRS) is thought to function in the stabilisation,
CC transport and processing (including alternative splicing) of newly
CC synthesised mRNAs. It facilitates the annealing of single-stranded
CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,
CC and shuttles continuously between the nucleus and the cytoplasm acting as
CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere
CC biogenesis, with low levels of hnRNP correlating with shortened
CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis
CC -associated protein on the basis that it is specifically cleaved into
CC three fragments during antibody-mediated apoptosis. Due to its ability to
CC control splicing events, particularly donor splice site selection, hnRNP
CC A1 is implicated in the process of oncogenesis. The oligonucleotides of
CC the invention are useful for diagnosis, prevention and treatment of
CC conditions associated with hnRNP A1 expression, such as cancer
XX
XX Sequence 20 BP; 6 A; 12 C; 1 G; 1 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 231 TGGTGTGTGTGGCGGAGTG 250
Db 20 TGGTGTGTGTGTGGAGGTG 1
RESULT 1820
AA60944/c 0.8%; Score 13.6; DB 1; Length 20;
ID AA60944 standard; DNA; 20 BP.
XX
XX AAF60944;
AC
XX
XX 15-MAY-2001 (first entry)
DT
XX
XX Anti-ICAM-1 oligonucleotide SEQ ID 53.
DE
XX
XX Transport; membrane; cytosolic; virulence; vasotropic; dermatological;
KM antiapoptotic; antischistosomal; gene therapy; tumor cell; antisense;
KW tumor therapy; drug; ss.
XX
XX Unidentified.
OS
XX
XX DE19935302-A1.
PN
XX

PD 08-FEB-2001.
XX
XX
XX 28-JUL-1999; 99DE-01035302.
PF
XX
XX 28-JUL-1999; 99DE-01035302.
PR
XX
XX (AVET) AVENTIS PHARMA DEUT GMBH.
PA
XX
XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;
PI
XX
XX WPI; 2001-203679/21.
DR
XX
XX
XX New substituted aryl conjugates of parent molecules, especially
PT oligonucleotides, having improved transmembrane and intracellular
PT transport properties, useful as medicaments or diagnostic agents.
XX
XX
XX Disclosure; Page 8; 28pp; German.
PS
XX
XX This invention describes a novel conjugate (I) which consists of (A) a
CC molecule to be transported and (B) at least one aryl residue of formula -
CC Ar-(X-C(Y)-R₁)_n (II). Ar = group containing at least one aromatic ring;
CC X = O or N (sic); Y = O, S or NH-R₂ (sic); R₁ = optionally substituted
CC 1-23C alkyl (optionally containing double and/or triple bonds); R₂ =
CC optionally substituted 1-18C alkyl (optionally containing double and/or
CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or
CC via a chemical group, provided that the chemical group is other than CH₂-
CC S if the bond is via a phosphodiester linkage of (A). The invention also
CC describes (i) the preparation of a conjugate (I') of (A') a molecule to
CC be transported and (B') at least one aryl residue (not restricted to
CC (II')), by preparing (A') containing a reactive function at the position
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');
CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical
CC group) for transporting (A) across biological membranes. The products of
CC the invention have cytostatic, antiviral, vasotropic, dermatological,
CC antiproliferative and antischistosomal activity and can be used for gene
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)
CC across biological membranes or into eukaryotic or prokaryotic cells
CC (specifically bacterial, yeast or mammalian cells, including human cells,
CC particularly tumor cells). Medicaments, diagnostic agents and test kits
CC containing (I) are also claimed. Typically (I) are antisense
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for
CC treating viral infections or diseases associated with integrins or cell-
CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
CC hybridization. Conjugation with (B) markedly improves the cellular uptake
CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
CC in which case the conjugates (I) are fluorescently labeled, allowing
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
CC is superior to that obtained using other conjugated groups related to
CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
CC the scope of (B)) have superior uptake to corresponding fluorescein
CC conjugates
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGGCGG 245
Db 20 GAGAGGAGGAGTGTGTGGG 1
RESULT 1821
AAD17434 0.8%; Score 13.6; DB 1; Length 20;
ID AAD17434 standard; DNA; 20 BP.
XX
XX AAD17434;
AC
XX
XX 29-NOV-2001 (first entry)
DT
XX
XX Mouse sfrp3 gene specific forward RT-PCR primer.
DE

XX Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;
KM chronic obstructive pulmonary disease; COPD; antisense therapy; mouse;
XX emphysema; reverse transcription PCR; RT-PCR primer; sfrp3 gene; ss.
OS Mus sp.
XX WO200164717-A1.
PN 07-SEP-2001.
PD 28-FEB-2001; 2001WO-US006579.
PP 29-FEB-2000; 2000US-00514885.
PR (UYCO) UNIV COLUMBIA NEW YORK.
PA D'armiento J, Imai K;
PI WPI; 2001-557764/62.
XX Inhibition of apoptosis for the treatment or prevention of obstructive
PT pulmonary disease comprises inhibiting expression of secreted Frizzled-
PT related protein gene in lung cells.
XX Example 2; Page 35; 79pp; English.
XX The present sequence is mouse secreted Frizzled-related protein (sfrp3)
CC gene specific reverse transcription PCR (RT-PCR) primer. The invention
CC relates to a method for treating or preventing chronic obstructive
CC pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis
CC in a subject. The method involves administering to the subject, an agent
CC effective to inhibit apoptosis by inhibiting the expression of a secreted
CC Frizzled-related protein (sFRP) gene. It is also useful in antisense
CC therapy
XX Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 890 ACATCATCAACATGCACAAC 909
DB 1 ACATGACCAAGATGCCCAAC 20
RESULT 1822
AADI7410
ID AADI7410 standard; DNA; 20 BP.
XX AADI7410;
AC 29-NOV-2001 (first entry)
DT Human sFRP4 gene specific forward RT-PCR primer.
XX Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;
KM chronic obstructive pulmonary disease; COPD; antisense therapy; human;
KM emphysema; reverse transcription PCR; RT-PCR primer; sFRP4 gene; ss.
XX Homo sapiens.
XX WO200164717-A1.
PN 07-SEP-2001.
PD 28-FEB-2001; 2001WO-US006579.
PP 29-FEB-2000; 2000US-00514885.
PR (UYCO) UNIV COLUMBIA NEW YORK.
PA
XX

PI D'armiento J, Imai K;
XX WPI; 2001-557764/62.
XX Inhibition of apoptosis for the treatment or prevention of obstructive
PT pulmonary disease comprises inhibiting expression of secreted Frizzled-
PT related protein gene in lung cells.
XX Example 2; Page 35; 79pp; English.
XX The present sequence is human secreted Frizzled-related protein 4 (sFRP4)
CC gene specific reverse transcription PCR (RT-PCR) primer. The invention
CC relates to a method for treating or preventing chronic obstructive
CC pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis
CC in a subject. The method involves administering to the subject, an agent
CC effective to inhibit apoptosis by inhibiting the expression of a secreted
CC Frizzled-related protein (sFRP) gene. It is also useful in antisense
CC therapy
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1289 TCCTGTCCACGAGGAGTTC 1308
DB 1 TCCTGTCCATCGAGAGTTC 20
RESULT 1823
AAS02589/c
ID AAS02589 standard; DNA; 20 BP.
XX AAS02589;
AC 29-AUG-2001 (first entry)
DT PCR primer RP.2(rev) used in analysis of MTS1 and MTS2.
XX Human; multiple tumor suppressor; MTS1; MTS2; therapeutic; diagnostic;
KM cancer; gene therapy; melanoma; leukaemia; astrocytoma; glioblastoma;
KM lymphoma; glioma; Hodgkin's lymphoma; chronic lymphatic leukaemia;
XX PCR primer; ss.
XX Homo sapiens.
XX US6210949-B1.
PN 03-APR-2001.
PD 30-NOV-1998; 98US-00201139.
PP 17-MAR-1995; 95WO-US003316.
PR 07-JUN-1995; 95US-00487033.
PR 28-JUL-1995; 95US-00508735.
XX (MYRI-) MYRIAD GENETICS INC.
XX Stone S, Jiang P, Kamb A;
PI WPI; 2001-280859/29.
DR New mouse multiple tumor suppressor gene, useful for diagnosing or
PT prognosing human cancer or as gene therapy for treating cancer,
PT particularly melanoma, leukemia, astrocytoma, lymphoma or cancers of the
PT pancreas or breast.
XX Example 7; Col 40; 80pp; English.
XX The sequence represents PCR primer RP.2(rev) used in analysis of multiple
CC tumour suppressor MTS1 and MTS2. The MTS genes, and expression products,
CC are useful for treating, diagnosing or prognosing human cancer. In

CC particular, the MTS gene is useful for diagnosing a predisposition to or
CC as a gene therapy for melanoma, leukemia, astrocytoma, glioblastoma,
CC lymphoma, glioma, Hodgkin's lymphoma, chronic lymphatic leukaemia (CLL),
CC or cancers of the pancreas, breast, thyroid, ovary, uterus, testis,
CC kidney, stomach or rectum. The gene may be used in both cancerous and pre
CC -cancerous cells
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGCTTACCTGGAGAGACT 524
DB 20 GAAGGCTTCTGACACGCT 1
RESULT 1824
AAS09545/C
ID AAS09545 standard; DNA; 20 BP.
XX
AC AAS09545;
XX
DT 24-OCT-2001 (first entry)
XX
DE FITC-labeled ICAM oligonucleotide.
XX
KW FITC; ICAM; oligonucleotide; ss; fluorescein isothiocyanate; VP22; BH3;
KW apoptosis; hyperproliferating cell; cancer; tumour; eczema;
KW cell-cycle progression regulator; genital warts; testenosis; skin cancer;
KW psoriasis; scar tissue; intracellular-adhesion molecule.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1
FT /*tag= a
FT /note= "C is labeled with FITC"
XX
EN WO200147960-A1.
XX
PD 05-JUL-2001.
XX
PF 21-DEC-2000; 2000WO-GB004965.
XX
PR 24-DEC-1999; 99GB-00030519.
XX
PA (PHOG-) PHOGEN LTD.
XX
PI O'hare PFJ, Normand NM, Brewis ND, Phelan A;
XX
DR WPI; 2001-418224/44.
XX
PT Inhibiting cancer cell proliferation by exposing cells to a composition
PT of fusion proteins comprising VP22 polypeptides coupled to cell cycle
PT progression regulators, and further exposing cells to cell death
PT stimulators.
XX
PS Disclosure; Page 14; 23pp; English.
XX
CC The sequence represents an FITC (fluorescein isothiocyanate) labeled
CC oligonucleotide complementary to part of the mRNA encoding the
CC intracellular-adhesion molecule ICAM. The oligonucleotide is included in
CC a composition comprising a fusion protein of herpes virus VP22 protein
CC 159-301 (having the transport function) and a cell-cycle progression
CC regulator (or its DNA) e.g. BH3 or apoptotic proteins. The composition is
CC used to reduce the proliferation of cells. The method of making the VP22
CC containing compositions is used for reducing proliferation of hyper-
CC proliferating cells e.g., cancer cells, for manufacturing a medicament to
CC reduce or treat cell proliferation e.g., cancer cell proliferation. The
CC method is also used for reducing or treating cell proliferation, in

CC tumour cells present in tumour cell mass, non-malignant cells e.g.,
CC benign tumour cells such as genital warts, smooth muscle cells present in
CC testenosis, proliferating skin cells e.g., skin cancer, psoriasis or
CC eczema skin cells, or proliferating cells of scar tissue
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGTGCGG 245
DB 20 GAGAGGGGAAAGTGTGTGCGG 1
RESULT 1825
AAH42979/C
ID AAH42979 standard; DNA; 20 BP.
XX
AC AAH42979;
XX
DT 15-OCT-2001 (first entry)
XX
DE PCR primer used to amplify a k-ras DNA sequence.
XX
KW HPV; genetic disease; gene anomaly; infectious disease; chlamydia;
KW congenital genetic disease; cancer; human papilloma virus; k-ras;
KW cystic fibrosis; mitochondrial cerebrohypathy; cervical cancer;
KW colon cancer; PCR primer; ss.
XX
OS Unidentified.
XX
PN WO200159124-A1.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2000; 2000WO-JP000693.
XX
PR 09-FEB-2000; 2000WO-JP000693.
XX
PA (SAPP-) SAPPORO IMMUNO DIAGNOSTIC LAB.
XX
PI Yamaguchi A, Kikuchi K, Nakamura K;
XX
DR WPI; 2001-497079/54.
XX
PT Convenient and cheap microplate fluorescent screening method for
PT detecting gene anomaly in e.g. infectious diseases, congenital genetic
PT diseases or cancers through gene diagnosis in community screening test
PT program.
XX
PS Claim 7; Page 22; 26pp; Japanese.
XX
CC PCR primers AAH42977-80 were used to amplify k-ras DNA sequences. The
CC primers are used in the method of the invention. The specification
CC describes a method for screening genetic diseases. The method comprises
CC using DNA simply extracted from a biological specimen such as scraped
CC mucosal cells and tissue slide pieces fixed with formalin and embedded in
CC paraffin, and amplifying a target region by polymerase chain reaction
CC (PCR) for direct fluorescence measurement of the additional double-
CC stranded DNA intercalator. The method is used for detecting gene anomaly
CC in e.g. infectious diseases, congenital genetic diseases or cancers,
CC including infection disease due to human papilloma virus and chlamydia
CC genetic diseases like cystic fibrosis, mitochondrial cerebrohypathy,
CC cancers of cervical cancer and colon cancer, through gene diagnosis in
CC community screening test program
XX
SQ Sequence 20 BP; 2 A; 1 C; 9 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

PN WO200128500-A2.
XX
PD 26-APR-2001.
XX
PF 18-OCT-2000; 2000WO-US041306.
XX
PR 18-OCT-1999; 99US-0159972P.
XX
PA (UYAR-) UNIV ARKANSAS.
XX
PI O'Brien TV, Tanimoto H, Underwood LJ, Shigemasa K;
XX WPI, 2001-290812/30.
DR
XX
PT Detecting tumor growth in an individual, particularly ovarian and ovarian
XX -derived metastatic tumors, comprises measuring antileukoprotease levels.
XX
PS Example 3; Page 10; 45pp; English.
XX
CC The invention relates to methods for the diagnosis and treatment of
CC ovarian tumours or ovarian-derived metastatic tumours in an individual.
CC The diagnostic method involves measuring the level of antileukoprotease
CC (ALP) in a sample (e.g., a blood sample, tissue biopsy or ovarian
CC secretion) from an individual. If the level of ALP exceeds the mean basal
CC level of ALP in non-diseased individuals by 2 or more standard
CC deviations, the individual is likely to have an ovarian or ovarian-
CC derived tumour. ALP, also known as secretory leukocyte proteinase (SLPI),
CC is a small (approximately 100 amino acids) secreted protease inhibitor
CC which specifically inhibits the activity of stratum corneum chymotryptic
CC enzyme, and is also able to inhibit leukocyte elastase, cathepsin G,
CC chymotrypsin and trypsin. It is significantly overexpressed in carcinomas
CC and potential tumours of ovarian origin. The invention also provides
CC methods of treating ovarian or ovarian-derived tumours, or preventing
CC ovarian tumour metastasis, via the administration of ALP. Methods of the
CC invention are useful for the diagnosis, prevention and treatment of
CC ovarian and ovarian-derived metastatic tumours, particularly low
CC malignant potential tumours or ovarian carcinomas such as serous carcinoma,
CC mucinous carcinoma, endometrioid carcinoma and clear cell carcinoma.
CC Sequences AAH23847-AAH23850 represent PCR primers used in quantitative
CC PCR in an exemplification of the invention to determine levels of ALP
CC mRNA from normal and cancerous ovarian tissue
XX
SQ Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1109 CCCCTGACATCCGCTTGGG 1128
DB 20 CCACTGATATCTCTCTTTGG 1
XX
RESULT 1829
AAC62058
ID AAC62058 standard; DNA; 20 BP.
XX
AC AAC62058;
XX
DT 06-MAR-2001 (first entry)
XX
DB PCR primer for nucleic acids encoding the human EAA5 receptor.
XX
KW Human; excitatory amino acid 4 receptor; EAA 4 receptor;
KW central nervous system receptor; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6136544-A.
XX
PD 24-OCT-2000.
XX
PF 20-JUN-1996; 96US-00666221.
XX

XX
PR 23-DEC-1993; 93US-00172188.
XX
PR 21-DEC-1994; 94WO-CA000705.
XX
PA (ALLX) ALLELIX BIOPHARMACEUTICALS INC.
XX
PI Nutt S, Kamboj R;
XX
DR WPI, 2001-048927/06.
XX
PT Isolated unedited human excitatory amino acid 4 receptor polynucleotides
XX and proteins, useful for screening potential therapeutic compounds and
XX drug candidates that interact with edited human central nervous system
XX receptor forms.
XX
PS Example 8; Col 21; 91pp; English.
XX
CC PCR primers AAC62056-60 were used to amplify nucleic acids encoding the
CC human excitatory amino acid (EAA) 5 receptor. The synthesis this central
CC nervous system (CNS) receptor in vivo is regulated by an editing
CC mechanism. This editing results in the expression from a single human CNS
CC receptor gene of structurally distinct forms of the CNS receptor protein.
CC The specification describes a human EAA4 receptor. The human excitatory
CC EAA4 receptor polynucleotide and the protein it encodes are useful for
CC screening potential therapeutic compounds and selecting drug candidates
CC that interact selectively with edited human central nervous system
XX receptor forms
XX
SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1211 CCGGCTCCAGCGTGAGGAA 1230
DB 1 CTGGCTCCGAGGTGTGAA 20
XX
RESULT 1830
AAD04717/c
ID AAD04717 standard; DNA; 20 BP.
XX
AC AAD04717;
XX
DT 04-JUL-2001 (first entry)
XX
DB Mouse P16beta cDNA amplifying P16-specific reverse PCR primer.
XX
KW Mouse; multiple tumour suppressor; MTS; cytosolic; somatic mutation;
KW germ line mutation; gene therapy; melanoma; leukemia; astrocytoma; CLL;
KW glioblastoma; lymphoma; glioma; Hodgkin's lymphoma; cancer; rectum; P16;
KW pancreas; breast; thyroid; ovary; uterus; testis; kidney; stomach; mouse;
XX P16beta; PCR primer; ss.
XX
OS Mus sp.
XX
PN US6218146-B1.
XX
PD 17-APR-2001.
XX
PF 22-JUL-1998; 98US-00120131.
XX
PR 18-MAR-1994; 94US-00214582.
PR 18-MAR-1994; 94US-00215086.
PR 18-MAR-1994; 94US-00215087.
PR 14-APR-1994; 94US-00227369.
PR 01-JUN-1994; 94US-00251938.
PR 17-MAR-1995; 95WO-US003316.
PR 07-JUN-1995; 95US-00486047.
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX

PI Kamb A;
XX
XX WPI; 2001-289831/30.
PT Novel multiple tumor suppressor proteins useful for diagnosis and
XX prognosis of human cancer and for screening drugs for cancer treatment.
PS Example 12; Col 50; 71pp; English.
XX
XX The invention relates to somatic and germ line mutations in the multiple
CC tumour suppressor (MTS) gene in human cancer. The invention also relates
CC to therapy of human cancer which have a mutation in the MTS gene,
CC including gene therapy, protein replacement therapy, and protein
CC mimetics. The MTS sequences are useful for diagnosing predisposition to
CC human cancer or for diagnosing and prognosing human cancers such as
CC melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma,
CC Hodgkin's lymphoma, CLL and cancers of pancreas, breast, thyroid, ovary,
CC uterus, testis, kidney, stomach and rectum. They are also used for
CC screening drugs for cancer treatment. The present sequence is p16-
CC specific reverse PCR primer used for amplifying mouse Plabeta cDNA
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 505 GAGGCTTCTGGAGAGCT 524
DB 20 GAAGGCTTCTGGAGAGCT 1
RESULT 1831
AAH48603/c
XX AAH48603 standard; DNA; 20 BP.
XX
AC AAH48603;
XX
DT 20-SEP-2001 (first entry)
XX
XX Human fascin associated primer SEQ ID 55.
DE
XX Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
KW antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
KW immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
KW Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
KW autoimmune disease; transplant rejection; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200151631-A2.
XX
PD 19-JUL-2001.
XX
PF 12-JAN-2001; 2001WO-EP000362.
XX
PR 13-JAN-2000; 2000DE-01001169.
XX
PR 02-MAR-2000; 2000DE-01010188.
XX
PA (RESK/) RESKE-KUNZ A.
PA (ROSS/) ROSS X.
PA (ROSS/) ROSS R.
PA (BROS/) BROS M.
XX
XX Reske-Kunz A, Ross X, Ross R, Bros M;
PI WPI; 2001-451858/48.
XX
XX New regulatory sequences from the fascin gene, useful for providing
PT dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
PT against tumors and infections.
XX
PS Claim 2b; Page 109; 117pp; German.

XX
CC This invention describes novel regulatory sequences (A) derived from
CC human fascin that provide specific expression in dendritic cells (DC) and
CC which have antiviral, antibacterial, antifungal, antiparasitic, anti-
CC allergic, neurological, immunomodulatory and apoptotic activity. (A) are
CC used to regulate expression of antigens, immunoregulators, antisense
CC sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
CC cells that contain (A) are useful: (i) in vaccines against viruses,
CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
CC Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
CC allergies, infections, autoimmune diseases and transplant rejection. They
CC can also be provide specific expression of cell factors and immunoregulators
CC in DC; for isolation and identification of cell factors and cis-elements
CC from regulatory sequences that mediate DC-specific expression; to
CC determine the degree of maturity of DC and to block transcription
CC factors, by providing binding sites in DC. (A) provide DC-specific
CC expression of nucleic acid under their control, allowing a more specific
CC regulation of the immune response and eliminating the long and laborious
CC purification of DC (since a complete leucocyte population may be
CC transformed), including transformation in vitro. This sequence represents
CC a primer associated with the human fascin gene described in the invention
XX
SQ Sequence 20 BP; 1 A; 10 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1631 CCAGGAGCGAGCGCTGAG 1650
DB 20 CCAGGAGCGAGCGCTGAG 1
RESULT 1832
AAAS4442
ID AAAS4442 standard; cDNA; 20 BP.
XX
AC AAAS4442;
XX
DT 11-APR-2001 (first entry)
XX
XX Primer for amplifying 11-cis retinol dehydrogenase (RDH5).
DE
XX 11-cis retinol dehydrogenase; RDH5; eye; mutant; mutation;
KW ocular disease; fundus albipunctatus; retinitis punctata albescens;
KW albipunctate dystrophy; retinitis pigmentosa; human; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200068364-A2.
XX
PD 16-NOV-2000.
XX
PF 08-MAY-2000; 2000WO-US012527.
XX
PR 06-MAY-1999; 99US-00306538.
XX
PR (LUDWIG-) LUDWIG INST CANCER RES.
PA (HARD-) HARVARD COLLEGE.
PA (MASS-) MASSACHUSETTS EYE & EAR INFIRMARY.
XX
XX Simon A, Eriksson U, Dryja TP, Berson EL, Yamamoto H;
PI WPI; 2001-016091/02.
XX
XX Mutations in nucleic acid molecules encoding 11-cis retinol dehydrogenase
PT correlated to ocular disorders, useful in diagnosis and treatment of
PT diseases such as fundus albipunctatus.
XX
XX Example 1; Page 7; 28pp; English.
XX
XX A new protein is described which comprises the 318 residue amino acid
CC sequence corresponding to wild type retinol dehydrogenase (RDH5), but

CC 33 where amino acid 238 is not GLY, amino acid 73 is not Ser, or amino acid
CC 33 is not Ile. This mutant RDH5 can be used in the analysis of mutations
CC in the gene encoding retinol dehydrogenase, in the diagnosis and
CC treatment of ocular diseases associated with retinal degeneration such as
CC fundus albipunctatus. Other disorders which may also be studied include
CC retinitis punctata abiensens, albipunctate dystrophy and retinitis
CC pigmentosa. A number of primer pairs (See GENESQ records AAA54433-
CC A54448) were used to amplify the genomic RDH5 DNA. Two primers (AAA54441,
CC AAA54442) were used to amplify exon 3b of the RDH5 gene. This primer
CC corresponds to nucleotides 3151-3170 of the genomic DNA sequence (See
CC GENESQ record AAA54431)

CC XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

QQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 56 TGTGACTGCTGAAACCCAGG 75
|||||
1 TGTTAGCTCTGGACCCAGG 20

RESULT 1833
AAC83096/C
ID AAC83096 standard; DNA; 20 BP.
XX
AC AAC83096;
XX
DT 23-FEB-2001 (first entry)
XX
DE Primer used to amplify mouse beta CDNA.
XX
MTS; Multiple Tumour Suppressor; cancer; antibody; ss.
XX
OS Mus sp.
XX
PN US6140473-A.
XX
PD 31-OCT-2000.
XX
PF 22-JUL-1998; 98US--00120128.
XX
PR 18-MAR-1994; 94US--00214562.
PR 18-MAR-1994; 94US--00215086.
PR 14-MAR-1994; 94US--00215087.
PR 14-APR-1994; 94US--00227369.
PR 01-JUN-1994; 94US--00251938.
PR 17-MAR-1995; 95WO-US003316.
PR 07-JUN-1995; 95US--00486047.
XX
PA (MYRI-) MYRIAD GENETICS INC.
XX
PI Kamb A;
XX
DR WPI; 2001-014867/02.
XX
PT New multiple tumor suppressor 2-specific antibodies useful for detecting
PT differences in the absence of the peptides or mutant gene products, or
PT for screening tissues.
XX
PS Example 12; Col 50; 71pp; English.
XX
CC The present invention relates to an antibody or its fragment that
CC specifically binds to a human multiple tumour suppressor (MTS). The
CC invention is useful for detecting differences in the absence of MTS
CC peptides, to screen a tissue or to detect mutant MTS gene products. The
CC antibodies will immunoprecipitate MTS proteins from solution as well as
CC react with MTS protein on Western or immunoblots of polyacrylamide gels
CC
QQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

| | | | |
|-----------------------|---|------------------------------------|----------------------------|
| Best Local Similarity | 80.0%; | Pred. No. 1.1e+03; | |
| Matches | 16; | Conservative | 0; Mismatches 4; Indels 0; |
| Db | 505 GAGGGTACTCTGAGAAAGCT 524 | | |
| | 20 GAAGGCTTCTGTGACACGCT 1 | | |
| QY | AAH78394 | | |
| AAH78394 | standard; DNA; 20 BP. | | |
| ID | AAH78394 | | |
| AC | AAH78394; | | |
| XX | | | |
| DT | 26-NOV-2001 (first entry) | | |
| DE | Probe used to detect a mutation in codon 12 of K-ras. | | |
| XX | | | |
| KM | DNA mutation: hereditary genetic disease; sickle cell anemia; probe; | | |
| XX | thalassemia; cystic fibrosis; haemophilia; cancer; K-ras; ss. | | |
| OS | Synthetic. | | |
| PN | WO200164945-A2. | | |
| PD | 07-SEP-2001. | | |
| PF | 01-MAR-2001; 2001WO-FR000604. | | |
| PR | 01-MAR-2000; 2000FR-00002614. | | |
| PA | (NUCL-) NUCLEICA. | | |
| PI | Cailloux F; | | |
| DR | WPI; 2001-557783/62. | | |
| XX | | | |
| PT | Detecting mutation in target nucleic acid, useful for detecting | | |
| PT | hereditary genetic diseases, comprises using chip whose electrical or | | |
| PT | optical property changes relative to the presence of hybridized probe. | | |
| XX | | | |
| PS | Example 5; Page 18; 36pp; French. | | |
| XX | | | |
| CC | The specification describes a method for detecting a mutation at a | | |
| CC | particular position in a target nucleic acid. The method comprises | | |
| CC | binding the target to a solid support, hybridizing a probe to the target, | | |
| CC | elongating the probe with nucleotide(s) resistant to exonuclease, | | |
| CC | digesting the probe with exonuclease and detecting bound nucleic acid. | | |
| CC | The mutation is in position 'n' in a target nucleic acid and the 3' | | |
| CC | extremity of the probe hybridizes to position 'n'. The method is used to | | |
| CC | detect gene mutations implicated in disease, particularly hereditary | | |
| CC | genetic diseases, especially sickle cell anemia, alpha and beta | | |
| CC | thalassemias, cystic fibrosis, haemophilia and genes implicated in | | |
| CC | cancer. The present sequence represents a probe which is used in the | | |
| CC | method of the invention to detect a mutation in codon 12 of K-ras | | |
| XX | | | |
| SQ | Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other; | | |
| QY | Query Match | 0.8%; Score 13.6; DB 1; Length 20; | |
| | Best Local Similarity | 80.0%; Pred. No. 1.1e+03; | |
| Matches | 16; Conservative | 0; Mismatches 4; Indels 0; | |
| Db | 229 AGTGGTGTGGTGGCGGACG 248 | | |
| | 1 ACTGGTGTGTGGTGGACGACG 20 | | |
| QY | AAH78394 | | |
| AAH78394 | standard; DNA; 20 BP. | | |
| ID | AAH78394 | | |
| AC | AAH78394; | | |
| XX | | | |
| DT | 26-NOV-2001 (first entry) | | |
| DE | Probe used to detect a mutation in codon 12 of K-ras. | | |
| XX | | | |
| KM | DNA mutation: hereditary genetic disease; sickle cell anemia; probe; | | |
| XX | thalassemia; cystic fibrosis; haemophilia; cancer; K-ras; ss. | | |
| OS | Synthetic. | | |
| PN | WO200164945-A2. | | |
| PD | 07-SEP-2001. | | |
| PF | 01-MAR-2001; 2001WO-FR000604. | | |
| PR | 01-MAR-2000; 2000FR-00002614. | | |
| PA | (NUCL-) NUCLEICA. | | |
| PI | Cailloux F; | | |
| DR | WPI; 2001-557783/62. | | |
| XX | | | |
| PT | Detecting mutation in target nucleic acid, useful for detecting | | |
| PT | hereditary genetic diseases, comprises using chip whose electrical or | | |
| PT | optical property changes relative to the presence of hybridized probe. | | |
| XX | | | |
| PS | Example 5; Page 18; 36pp; French. | | |
| XX | | | |
| CC | The specification describes a method for detecting a mutation at a | | |
| CC | particular position in a target nucleic acid. The method comprises | | |
| CC | binding the target to a solid support, hybridizing a probe to the target, | | |
| CC | elongating the probe with nucleotide(s) resistant to exonuclease, | | |
| CC | digesting the probe with exonuclease and detecting bound nucleic acid. | | |
| CC | The mutation is in position 'n' in a target nucleic acid and the 3' | | |
| CC | extremity of the probe hybridizes to position 'n'. The method is used to | | |
| CC | detect gene mutations implicated in disease, particularly hereditary | | |
| CC | genetic diseases, especially sickle cell anemia, alpha and beta | | |
| CC | thalassemias, cystic fibrosis, haemophilia and genes implicated in | | |
| CC | cancer. The present sequence represents a probe which is used in the | | |
| CC | method of the invention to detect a mutation in codon 12 of K-ras | | |
| XX | | | |
| SQ | Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other; | | |
| QY | Query Match | 0.8%; Score 13.6; DB 1; Length 20; | |
| | Best Local Similarity | 80.0%; Pred. No. 1.1e+03; | |
| Matches | 16; Conservative | 0; Mismatches 4; Indels 0; | |
| Db | 229 AGTGGTGTGGTGGCGGACG 248 | | |
| | 1 ACTGGTGTGTGGTGGACGACG 20 | | |
| QY | AAH78394 | | |
| AAH78394 | standard; DNA; 20 BP. | | |
| ID | AAH78394 | | |
| AC | AAH78394; | | |
| XX | | | |
| DT | 26-NOV-2001 (first entry) | | |
| DE | Probe used to detect a mutation in codon 12 of K-ras. | | |
| XX | | | |
| KM | DNA mutation: hereditary genetic disease; sickle cell anemia; probe; | | |
| XX | thalassemia; cystic fibrosis; haemophilia; cancer; K-ras; ss. | | |
| OS | Synthetic. | | |
| PN | WO200164945-A2. | | |
| PD | 07-SEP-2001. | | |
| PF | 01-MAR-2001; 2001WO-FR000604. | | |
| PR | 01-MAR-2000; 2000FR-00002614. | | |
| PA | (NUCL-) NUCLEICA. | | |
| PI | Cailloux F; | | |
| DR | WPI; 2001-557783/62. | | |
| XX | | | |
| PT | Detecting mutation in target nucleic acid, useful for detecting | | |
| PT | hereditary genetic diseases, comprises using chip whose electrical or | | |
| PT | optical property changes relative to the presence of hybridized probe. | | |
| XX | | | |
| PS | Example 5; Page 18; 36pp; French. | | |
| XX | | | |
| CC | The specification describes a method | | |

```

DT 25-SEP-2001 (first entry)
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6255046-B1.
XX
XX 03-JUL-2001.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2001-424617/45.
XX
XX Screening for agents which inhibit the activity of the oncogenic
XX phosphoglucosaminidase isozyme-2.
XX
XX Example 4; Col 9; 29pp; English.
XX
XX The present invention relates to a method for screening a candidate
XX therapeutic agent that inhibits kinase enzymatic activity of
XX phosphofructokinase isozyme (iPFK-2). Phosphofructokinase catalyses the
XX formation of fructose 2,6-bisphosphate from fructose-6-phosphate. The
XX method is used for identifying compounds that may be used to inhibit iPFK
XX -2 activity, an enzyme that is over-expressed by cancerous cells. iPFK-2
XX is useful as diagnostic targets, drug screening targets and as antisense
XX compounds that inhibit inflammation, cachexia and its translation in
XX cellular cytosol as an anti-tumour treatment. The present sequence is
XX human phosphofructokinase isozyme (iPFK-2) DNA specific phosphorothioate
XX sense oligonucleotide (S-iPFK-2) used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1679 CCACTACATCTTCCTGCT 1698
XX DB 20 CCAACGCGATCTTCGCGGCT 1
XX
XX RESULT 1836
XX AAD11920
XX ID AAD11920 standard; DNA; 20 BP.
XX
XX AC AAD11920;
XX
XX DT 25-SEP-2001 (first entry)
XX
XX DE Human iPFK-2 DNA specific phosphorothioate antisense oligonucleotide #1.
XX
XX KW Human; phosphofructokinase isozyme-2; iPFK-2; therapy; drug screening;
XX cancer; inflammation; cachexia; anti-tumour; phosphorothioate backbone;
XX ss.

```

```

XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX FH modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX
XX US6255046-B1.
XX
XX 03-JUL-2001.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2001-424617/45.
XX
XX Screening for agents which inhibit the activity of the oncogenic
XX phosphoglucosaminidase isozyme-2.
XX
XX Example 4; Col 9; 29pp; English.
XX
XX The present invention relates to a method for screening a candidate
XX therapeutic agent that inhibits kinase enzymatic activity of
XX phosphofructokinase isozyme (iPFK-2). Phosphofructokinase catalyses the
XX formation of fructose 2,6-bisphosphate from fructose-6-phosphate. The
XX method is used for identifying compounds that may be used to inhibit iPFK
XX -2 activity, an enzyme that is over-expressed by cancerous cells. iPFK-2
XX is useful as diagnostic targets, drug screening targets and as antisense
XX compounds that inhibit inflammation, cachexia and its translation in
XX cellular cytosol as an anti-tumour treatment. The present sequence is
XX human phosphofructokinase isozyme (iPFK-2) DNA specific phosphorothioate
XX antisense oligonucleotide (AS-iPFK-2) used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1679 CCACTACATCTTCCTGCT 1698
XX DB 1 CCAACGCGATCTTCGCGGCT 20
XX
XX RESULT 1837
XX AAF74084
XX ID AAF74084 standard; DNA; 20 BP.
XX
XX AC AAF74084;
XX
XX DT 30-APR-2001 (first entry)
XX
XX DE Primer #18.
XX
XX KW Solute carrier family 6 neurotransmitter transporter; seotonin 4; SLC6A4;
XX genotyping; allele specific oligonucleotide; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200109161-A1.
XX
XX PD 08-FEB-2001.
XX
XX PF 31-JUL-2000; 2000WO-US020638.

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XX 29-JUL-1999; 99US-0146290P.
PR
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX Denton RR, Duda A, Nandabalan K, Sanchis A, Stephens JC;
PI WPI; 2001-123317/13.
XX
XX New isolated polynucleotide comprising a polymorphic variant for the
PT solute carrier family 6 neurotransmitter transporter, serotonin member 4
PT gene for identifying drugs for treating disorders related to expression
PT of the protein.
XX
XX Example 1; Page 33; 152pp; English.
PS
XX The present invention relates to a polymorphic variant of a reference
CC sequence for the solute carrier family 6 neurotransmitter transporter,
CC serotonin member 4 (SLC6A4) gene or a fragment of it or a sequence
CC complementary to the first sequence. The invention is used in producing a
CC recombinant organism that can be used to express SLC6A4 for protein
CC structure analysis and binding studies. A composition comprising a
CC genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4
CC gene
CC
XX Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 217 GGCTCGATGAGAGTGTGG 236
Db 1 GGCTCGATGAGTGTCTGG 20
|||||
|
RESULT 1838
AAF85418/c
ID AAF85418 standard; DNA; 20 BP.
XX
XX AAF85418;
AC
XX
XX 23-JUL-2001 (first entry)
DT
XX
XX Primer used to amplify cDNA encoding rat mu-subtype opiate receptor.
DE
XX mu-subtype opioid receptor; G protein; opioid; drug addiction;
KM PCR primer; ss.
XX
XX Rattus rattus.
OS
XX
XX US6225080-B1.
PN
XX
XX 01-MAY-2001.
PD
XX
XX 28-APR-1995; 95US-00430286.
PF
XX
XX 23-MAR-1992; 92US-00855286.
PR
XX 26-FEB-1993; 93US-00026140.
PR 11-JUN-1993; 93US-00075447.
XX
XX (UHLG/) UHL G R.
PA (BEP/) EPPLE C M.
PA (WANG/) WANG J.
XX
XX Uhl GR, Eppler CM, Wang J;
PI
XX
XX WPI; 2001-342395/36.
DR
XX
XX Novel isolated DNA encoding mu-subtype opioid receptor protein which is
PT useful for identifying other receptor subtypes, screening for mu opioid
PT ligands and for understanding mechanisms of opioid action.
XX
```

```
PS Example; Col 10; 51pp; English.
XX
XX PCR primer used to amplify cDNA encoding a rat mu-subtype opioid
CC receptor. The polynucleotide sequence is useful for producing a mu-type
CC opioid receptor by standard recombinant techniques. The encoded protein
CC is useful for producing monoclonal or polyclonal anti-receptor antibodies
CC and to identify patterns of post-translational modifications and to
CC elucidate associated G proteins. Mu receptor polynucleotides and
CC polypeptides are useful in identifying other receptor subtypes, in
CC screening for new opioid ligands and for understanding mechanisms of
CC opioid action e.g., drug addiction
XX
XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 849 CCTGACAGAGCCTGAAAC 868
Db 20 CCTGACGAGAACTTCAAGC 1
|||||
|
RESULT 1839
AAH49228/c
ID AAH49228 standard; DNA; 20 BP.
XX
XX AAH49228;
AC
XX
XX 26-NOV-2001 (first entry)
DT
XX
XX Anti-ICAM oligonucleotide XXI.
DE
XX
XX Polyamide-oligonucleotide derivative; anticancer; antiproliferative;
KM antiviral; hepatotropic; vasotropic; antisense inhibition; ribozyme;
KM integrin; cell-cell adhesion; cancer; restenosis; stability; PNA;
KM peptide nucleic acid; ss.
XX
XX Synthetic.
OS
XX
XX EP113021-A2.
PN
XX
XX 04-JUL-2001.
PD
XX
XX 08-MAR-1995; 2001EP-00104012.
PP
XX
XX 14-MAR-1994; 94DE-04408528.
PR 08-MAR-1995; 95EP-00103332.
XX
XX (AVET ) AVENTIS PHARMA DEUT GMBH.
PA
XX
XX Uhlmann E, Breipohl G;
PI
XX
XX WPI; 2001-591267/67.
DR
XX
XX New DNA-peptide nucleic acid chimeras, useful e.g. as antisense agents
PT for treating e.g. cancer, also as diagnostic probes and primers.
PT
XX
XX Disclosure; Page 24; 54pp; German.
PS
XX
XX This invention describes novel polyamide-oligonucleotide derivatives (I)
CC and their physiologically acceptable salts of formula F((DNA)-Li) q(PNA-
CC Li) r(DNA-Li) s(PNA) t) xp, where q, r, s, t = 0 or 1, with the sum of
CC two or more adjacent letters at least 2; x = 1-20; DNA = nucleic acid
CC (such as DNA or RNA or their known derivatives); Li = covalent linkage
CC between DNA and PNA, i.e. a bond or a residue containing at least one
CC atom of carbon, nitrogen, oxygen or sulfur; PNA = polyamide structure
CC containing at least one nucleobase different from thymine; and F, F' =
CC end groups and/or are connected through a covalent bond. The products of
CC the invention have anticancer, antiproliferative, antiviral, hepatotropic
CC and vasotropic activity and can be used for the inhibition of gene
CC expression by antisense, ribozyme, sense, or triple-helix methods, or by
CC binding to proteins (aptamers). (I) are used for treating diseases caused
```

by viruses (human immune deficiency, herpes simplex, influenza, vesicular stomatitis, hepatitis B or papilloma), or mediated by integrating or cell-cell adhesion reactions, for treating cancer, or for inhibiting retestosis, particularly as antisense reagents. They are also useful in heterogeneous or homogeneous assays, as primers or probes, particularly where the target is amplified before being detected by hybridization, for the diagnosis of genetic, malignant or pathogen-related diseases. (i) retain the increased affinity for complementary strands and better stability in serum, associated with conventional peptide nucleic acids (PNA), but lack the disadvantages, i.e. have improved cellular uptake, do not aggregate in aqueous solution, and have reduced affinity for purification materials, reduced cytotoxicity, better sequence specificity. They are more active than either DNA or PNA oligomers. When used as probes, (i) show different responses to base-pair mismatches in the DNA and PNA segments, allowing better discrimination between pathogenic and non-pathogenic conditions such as the transition from proto-oncogene to oncogene, also, when used as primers, with the PNA segment at the 5'-end, they produce amplicons resistant to 5'-exonuclease, allowing this enzyme to be used to eliminate RNA or DNA primers. The DNA component allows additional reactions not possible with PNA alone, e.g. 3'-tailing and (i) may be incorporated into a gene. AAH49208-AAH49264 represent oligonucleotides used to illustrate the method of the invention

Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGTGTGGCGG 245
||| ||| ||| ||| |||
DB 20 GAGAGGGGAGAGTGTGTGGCGG 1

RESULT 1840
AAF87785/C
ID AAF87785 standard; DNA; 20 BP.
XX AAF87785;
AC
XX 11-JUL-2001 (first entry)
DT
XX
DE DNA 20-mer ASO (antisense DNA oligomer) SEQ ID NO:12.
XX
XX Antisense DNA oligomer; ASO; identification; gene therapy; target;
KW Nearest-Neighbour Thermal Stability Program; thermal melting temperature;
KW phosphorothioate; disease treatment; DNA:RNA hybrid; ss.
XX
XX Synthetic.
OS
XX
XX US6183966-B1.
PN
XX
PD 06-FEB-2001.
XX
XX 22-JAN-1999; 99US-00235614.
PF
XX
XX 07-OCT-1994; 94US-00320507.
PR 03-MAR-1997; 97US-00808474.
XX
XX (TEXA) UNIV TEXAS SYSTEM.
PA
XX
XX Gray DM, Clark CL;
PI
XX WPI, 2001-280429/29.
DR
XX
XX Identifying a nucleic acid having a sequence capable of targeting a gene
PT of interest, for identifying nucleic acids for gene therapy, comprises
PR using the Nearest-Neighbor Thermal Stability Program.
XX
XX Example 1; Col 21-22; 43pp; English.
PS
XX The present invention describes a method for the identification of a
CC nucleic acid having a sequence capable of targeting a gene of interest

comprises: (a) a first database having a list of stability values for independent combinations of N(x); (b) a computing unit having a means for inputting data comprising N(x), data list, defining a nucleic acid sequence of interest to be targeted to provide a second database; and (c) a program capable of processing the first and second database to N(x) comparison, and a stability value of a nucleic acid sequence capable of targeting the gene of interest. The method is useful for identifying a nucleic acid having a sequence capable of targeting a gene of interest. These nucleic acids are useful in gene therapy and disease treatment. The method may be used to obtain thermodynamic parameters for 20 combinations of nearest-neighbour base pairs of DNA:RNA hybrid sequences. The Nearest-Neighbour Thermal Stability Program can process data for use in calculating thermal melting temperatures for phosphorothioate DNA:RNA hybrids. The program can be readily extended to predict the most stable triplex-forming sequences, or antigenic oligomers. The present sequence represents a DNA 20-mer ASO (antisense DNA oligomer) sequence which is used in the exemplification of the present invention

Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGTGTGGCGG 245
||| ||| ||| ||| |||
DB 20 GAGAGGGGAGAGTGTGTGGCGG 1

RESULT 1841
AAF87788/C
ID AAF87788 standard; DNA; 20 BP.
XX AAF87788;
AC
XX 11-JUL-2001 (first entry)
DT
XX
DE Human intracellular adhesion molecule 1 (ICAM-1) S-ASO SEQ ID NO:15.
XX
XX Antisense DNA oligomer; ASO; identification; gene therapy; target;
KW Nearest-Neighbour Thermal Stability Program; thermal melting temperature;
KW phosphorothioate; disease treatment; DNA:RNA hybrid; human; ICAM-1;
KW intracellular adhesion molecule 1; ss.
XX
XX Homo sapiens.
OS
XX
XX US6183966-B1.
PN
XX
PD 06-FEB-2001.
XX
XX 22-JAN-1999; 99US-00235614.
PF
XX
XX 07-OCT-1994; 94US-00320507.
PR 03-MAR-1997; 97US-00808474.
XX
XX (TEXA) UNIV TEXAS SYSTEM.
PA
XX
XX Gray DM, Clark CL;
PI
XX WPI, 2001-280429/29.
DR
XX
XX Identifying a nucleic acid having a sequence capable of targeting a gene
PT of interest, for identifying nucleic acids for gene therapy, comprises
PR using the Nearest-Neighbor Thermal Stability Program.
XX
XX Example 1; Col 25-26; 43pp; English.
PS
XX The present invention describes a method for the identification of a
CC nucleic acid having a sequence capable of targeting a gene of interest
CC comprises: (a) a first database having a list of stability values for independent combinations of N(x); (b) a computing unit having a means for inputting data comprising N(x), data list, defining a nucleic acid sequence of interest to be targeted to provide a second database; and (c)

PT function of VP22 and oligonucleotides/polynucleotides with disaggregating
PT agent, useful for treating or preventing cell proliferation.

XX Example 1; Page 17; 31pp; English.

XX
XX
XX The invention relates to the use of aggregates comprising VP22 (viral
CC protein 22) protein (or a polypeptide with the transport function of
CC VP22), and oligonucleotides or polynucleotides with a disaggregating
CC agent e.g. Aluminium phthalocyanine (AlP) (simultaneously or sequentially)
CC to treat target cells by delivering molecules to the cells and/or
CC preventing cell proliferation and/or killing cells. Also included are a
CC method of treating target cells to deliver molecules to the cells and/or
CC prevent their proliferation and/or kill them comprising: (a) exposing the
CC cells to the aggregate composition cited above; and (b) exposing the
CC cells to the disaggregating agent cited above, which can promote
CC disaggregation of the aggregate composition in cells, where steps (a) and
CC (b) are carried out simultaneously or sequentially. A product comprising
CC the aggregate composition and the disaggregating agent, as combined
CC preparation for administration of these components, either sequentially
CC or together, a pharmaceutical comprising the aggregate composition and
CC the disaggregating agent, in combination with a pharmaceutical excipient
CC and a cell preparation obtainable by treating the target cells in vitro
CC as cited in the method above. The aggregate composition and
CC disaggregating agent are useful in the manufacture of a medicament for
CC treating diseases or target cells, and/or preventing cell proliferation
CC and/or killing cells. These compositions, product or pharmaceutical are
CC useful in therapy, particularly for manufacturing medicaments for use in
CC therapy, or as a medicament for delivering molecules to cells to prevent
CC cell proliferation or kill cells. In particular, these may be used for
CC treating psoriasis, eczema, skin cancer, restenosis and scarring. The
CC present sequence is an oligonucleotide encoding an intracellular adhesion
CC molecule, ICAM, which can form aggregates and is used to demonstrate the
CC method of the invention

SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGTGCGG 245
DB 20 GAGAGGGGGAAGTGTGTGCGG 1
||||| ||| ||| ||| |||

RESULT 1844
ABL01636/C
ID ABL01636 standard; DNA; 20 BP.

XX ABL01636;

XX 15-MAR-2002 (first entry)

XX ICAM-1 targeted antisense peptide nucleic acid SEQ ID NO: 42.

XX Peptide nucleic acid; PNA; cytosolic; virucide; dermatological;
XX antiaslarmic; overexpression; viral infection; vitiligo; antisense;
XX pigmentaction disorder; asthma; polyamide backbone; ss.

XX Unidentified.

XX Key Location/Qualifiers
FH 1. 20
FT /tag= a
FT /note= "This sequence is a peptide nucleic acid, i.e. it
FT contains a polyamide backbone instead of a deoxyribose
FT backbone"

FT modified_base 1
FT /tag= b
FT /mod_base= OTHER
FT /note= "linked to one of the peptides shown in ABB04517
FT and ABB04518 to form a PNA-peptide conjugate"

PN WO200179216-A2.

XX 25-OCT-2001.

XX 07-APR-2001; 2001WO-EP004030.

XX 18-APR-2000; 2000DB-01019135.

XX (AVET) AVENTIS PHARMA DEUT GMBH.

XX Uhlmann E, Breipohl G, Wall DW;

XX WPI; 2002-075055/10.

XX New peptide nucleic acid derivatives, useful e.g. for tumor treatment and
PT diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g.
PT improved solubility.

XX Disclosure; Page 22; 93pp; German.

XX The present invention relates to peptide nucleic acid (PNA) derivatives
CC having at the C-, and optionally N-, terminus one or more phosphoryl
CC groups, at least one of which contains one or more deprotonisable groups,
CC preferably hydroxy or mercapto. These PNAs are useful in the treatment of
CC tumours or any disease associated with (over)expression of particular
CC genes, including viral infections, vitiligo or other pigmentaction
CC disorders, and asthma. The present sequence is a peptide nucleic acid
CC described in the exemplification of the invention

SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGTGTGTGTGTGCGG 245
DB 20 GAGAGGGGGAAGTGTGTGCGG 1
||||| ||| ||| ||| |||

RESULT 1845
ABK86419
ID ABK86419 standard; DNA; 20 BP.

XX ABK86419;

XX 07-AUG-2003 (revised)

XX 26-AUG-2002 (first entry)

XX HHV4a nuclear protein EBNA2 forward real time PCR primer.

XX Human herpes virus infection; ss; real time PCR; primer; HHV1; HHV2;
XX HHV3; HHV4; HHV5; HHV6; HHV7; HHV8; latent membrane protein-1; LMP-1;
XX nuclear protein EBNA2; intermediate early protein; IE; glycoprotein B;
XX KI glycoprotein.

XX Human herpesvirus 4.

XX WO200234953-A2.

XX 02-MAY-2002.

XX 12-OCT-2001; 2001WO-US031892.

XX 24-OCT-2000; 2000US-0242903P.

XX (HARR) HARRIS R B.

XX Harris RB, Reynolds TR;

XX WPI; 2002-463369/49.

XX Detecting infection of human herpes virus type or strain by informatic

PT analysis of gene sequence using probe and primers capable of directing
PT amplification of target sequence and interpolating the virus.
PS Claim 18; Page 35; 67pp; English.
XX
XX
XX
CC The invention relates to detecting (M1) infection by human herpes virus
CC (HHV) by performing informatics analysis of gene sequences from different
CC HHV types or strains (e.g. HHV1-HHV8) to identify target segment (TS),
CC selecting probe and primers capable of directing amplification,
CC amplifying TS, interpolating HHV number by comparing number of
CC amplification cycles (NAC) for detecting TS to NAC to detect known
CC quantity of TS. Also included are cloning a segment of genomic viral DNA
CC from the identified TS (M2), a polynucleotide (I) molecule having any one
CC of 61 nucleotide sequences appearing as ABK86401-ABK86461, a vector
CC comprising a fragment of a gene that encodes an HHV1 thymidine kinase
CC protein, HHV2 thymidine kinase protein, a thymidine kinase protein from a
CC drug-resistant HHV2, thymidine kinase protein from a drug-resistant HHV1
CC or a drug resistant HHV2, HHV3 thymidine kinase protein, HHV4 latent
CC membrane protein-1 or an HHV4b latent membrane protein-1, an HHV4a
CC nuclear protein EBNA2, HHV4b nuclear protein EBNA2, an HHV5 intermediate
CC early protein, HHV6a glycoprotein B or an HHV6b glycoprotein B, an HHV6a
CC intermediate early protein, HHV6b intermediate early protein, an HHV7
CC glycoprotein B, and an HHV8 K1 glycoprotein (i.e. the target sequences),
CC and a fluorogenic probe with a fluorescent reporter group covalently
CC attached to the probe, and a fluorescence quencher group covalently
CC attached to the probe. (M1) is useful for detecting infection by a
CC particular type or a strain of HHV in a sample from an individual
CC suspected of having HHV. (M2) is useful for cloning (M2) a segment of
CC genomic HHV viral DNA. (M1) is useful for creating a screening platform
CC to analyse the effectiveness of pharmaceuticals by measuring the ability
CC of anti-viral agents to mediate HHV propagation. (M1) allows accurate and
CC sensitive diagnosis of HHV infection in patients. Unlike conventional
CC procedures, infection by one strain of a specific type of HHV can be
CC distinguished from infection by another strain of the same HHV type. The
CC method allows detection of infection by HHV that cannot be detected by
CC conventional PCR approaches. In addition to determining specific activity
CC of anti-viral agents, purification of promising anti-viral agents can
CC also be tracked, thus circumvents problems endemic to ex vivo testing,
CC such as drug toxicity and side effects. (M1) is also applied to HHV
CC strains for which complete sequence data is unavailable. The present
CC sequence is the HHV4a nuclear protein EBNA2 forward real time PCR primer.
CC (Updated on 07-ANG-2003 to correct OS field.)
XX
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1542 GGCCAGCCTTCGGTCTTCGT 1561
DB 1 GTCCAGTCTCCTCGTCTTCAT 20
RESULT 1846
AAD41528/c
ID AAD41528 standard; DNA; 20 BP.
XX
AC AAD41528;
XX
DT 30-OCT-2002 (first entry)
XX
DE Collagenase 1 gene specific reverse RT-PCR primer.
XX
XX Marker: vitamin D analogue; antiproliferative; cancer; osteodystrophy;
XX multiple sclerosis; osteoporosis; osteomalacia; hyperparathyroidism;
XX genoprotective; epidermal wound; chemoprotective; DNA repair mechanism;
XX cystostatic; psoriasis; neuroprotective; vulnerrary; RT-PCR; primer; ss.
OS Unidentified.
XX
XX
XX WO200244403-A2.
XX

PD 06-JUN-2002.
XX
XX
PF 28-NOV-2001; 2001WO-CA001689.
XX
XX
PR 29-NOV-2000; 2000US-0253746P.
PR 02-MAY-2001; 2001US-0287729P.
XX
XX
PA (UWMC-) UNIV MCGILL.
PI
PI White JH;
DR WPI; 2002-537456/57.
XX
XX
PT Novel marker for testing analogs of vitamin D expected to be effective in
PT reducing aberrant activity of vitamin D-responsive cell, comprises gene
PT pertinent to action of vitamin D for testing the analogs.
PS Example 2; Page 48; 89pp; English.
XX
XX
CC The invention relates to a marker for testing analogues of vitamin D
CC expected to be effective in reducing aberrant activity of vitamin D-
CC responsive cell, comprises at least one gene pertinent to the action of
CC vitamin D for testing the analogues and determining analogues capable of
CC regulating the gene, and is indicative of a chemopreventive or
CC chemotherapeutic agent. The invention is useful for testing analogues of
CC vitamin D expected to be effective in reducing aberrant activity of
CC vitamin D-responsive cell or for testing analogues of vitamin D suspected
CC to have antiproliferative activity. The invention is useful for reducing
CC aberrant activity of vitamin D-responsive cell, and for treating a
CC disorder characterized by an aberrant activity of vitamin D-responsive
CC cell, where the disorder is selected from cancer, psoriasis, multiple
CC sclerosis, osteoporosis, osteodystrophy, osteomalacia and
CC hyperparathyroidism. The invention is useful for identifying regulated
CC target genes correlated with the antiproliferative effect of vitamin D
CC and its analogues. The invention is useful for protecting against in vivo
CC DNA damage, for inducing in vivo DNA repair mechanisms in a mammal, or
CC for reducing or preventing DNA damage to the skin of a mammal, preferably
CC human. The invention is useful as a genoprotective or chemoprotective
CC agent. The invention is useful as a marker for the activity of DNA repair
CC mechanisms. The invention is useful for testing compounds susceptible of
CC inhibiting an enzyme which metabolises 1,25-dihydroxyvitamin D3. The
CC invention is useful for treating epidermal wounds. The present sequence
CC is collagenase 1 gene specific RT-PCR primer
XX
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 965 AGTGCTACACCGAGACCTC 984
DB 20 ATGTGCTACACGAGTACCCC 1
RESULT 1847
ABL58571
ID ABL58571 standard; DNA; 20 BP.
XX
XX ABL58571;
XX
XX 26-JUN-2002 (first entry)
XX
DE ARF/HK33 protein related primer #1.
XX
XX HK33; housekeeping gene 33; ARF; tumour; PCR; primer; ss.
XX
XX Synthetic.
XX
XX WO200220770-A1.
XX
XX 14-MAR-2002.
XX

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PF 06-SEP-2001; 2001WO-JP007732.
XX
XX 08-SEP-2000; 2000UP-00274209.
PI (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
PA (NAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX
XX Sugihara T, Wadhwa R, Kaul SC;
XX
XX WPI, 2002-393846/42.
XX
XX New isolated human or mouse targeting peptide useful for targeted
XX delivery of therapeutic agents, for inhibiting angiogenesis, tumor growth
XX or pregnancy, and for inducing apoptosis or weight loss.
XX
XX Example 6; Page 76; 81pp; Japanese.
XX
XX The invention relates to the screening of antitumor agents by using the
XX interaction between ARF protein and HK33 (Housekeeping 33) protein.
XX Nuclear transport of ARF protein is inhibited by the expression of HK33
XX gene, and thus p53-dependent transcription is suppressed. In immortalised
XX cells, moreover, the expression of HK33 gene is significantly elevated.
XX The invention provides a method of screening an antitumor agent by using
XX the interaction between ARF protein and HK33 protein. It also provides a
XX method for utilisation of HK33 protein and a gene encoding it in the
XX examination of tumour related disease. The current sequence represents a
XX ARF/HK33 protein related primer
XX
XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match
XX Best Local Similarity 80.0%; Score 13.6; DB 1; Length 20;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 1468 CTGGGGGAGCGGATCCACAA 1487
XX ||||| ||||| ||||| |||||
XX 1 CTGGTGGAGCAGTCCAAAA 20
XX
XX RESULT 1848
XX ABL52358/c
XX ID ABL52358 standard; DNA; 20 BP.
XX
XX ABL52358;
XX
XX 15-JUL-2002 (first entry)
XX
XX Mouse FLIP-c chimeric phosphorothioate oligonucleotide SEQ ID NO:36.
XX
XX FLIP-c; caspase 8 dominant negative regulator; antiinflammatory;
XX anti-tumour; FLIP-c inhibitor; apoptosis; antisense gene therapy;
XX phosphorothioate; antisense modulation; infection; inflammation; tumour;
XX ss.
XX
XX Mus musculus.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Chimeric phosphorothioate oligonucleotide having
XX 2'-methoxyethyl (2'-MOE) wings"
XX
XX WO200224717-A1.
XX
XX 28-MAR-2002.
XX
XX 14-SEP-2001; 2001WO-US028732.
XX
XX 20-SEP-2000; 2000US-0066269.
XX
XX (ISIS-) ISIS PHARM INC.
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XX
XX Ackermann EJ, Bennett CF, Zhang H, Watt AT, Ricketts W, Dean NM;
PI
XX WPI, 2002-404948/43.
XX
XX Novel antisense compound that hybridizes and inhibits nucleic acid
XX encoding a natural dominant negative regulator of caspase 8, FLIP-c,
XX useful for preventing or delaying infection, inflammation or tumor
XX formation.
XX
XX Claim 3; Page 99; 154pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule (II) encoding a natural dominant
XX negative regulator of caspase 8, FLIP-c, where (II) specifically
XX hybridises with and inhibits expression of the protein, or specifically
XX hybridises with at least an 8-nucleobase portion of an active site on
XX (II). (I) has antiinflammatory and anti-tumour activities. (I) is an
XX inhibitor of FLIP-c expression, a modulator of apoptosis and can be used
XX in antisense gene therapy. (I) is useful for inhibiting the expression of
XX FLIP-c in cells or tissues, and for treating an animal having a disease
XX or condition associated with FLIP-c. (I) is also useful for modulating
XX apoptosis in a cell, where a caspase such as caspase 8, caspase 3 or
XX caspase 7 is activated, and the FLIP-c is the long form of FLIP-c. (I) is
XX also useful for diagnostics, therapeutics, prophylaxis, as research
XX reagents and kits, for distinguishing functions of various members of a
XX biological pathway, and in antisense gene therapy. (I) is also useful
XX prophylactically, e.g., to prevent or delay infection, inflammation or
XX tumour formation. The present sequence represents mouse FLIP-c inhibiting
XX chimeric phosphorothioate oligonucleotide having 2'-methoxyethyl (2'-MOE)
XX wings, which is used in an example from the present invention
XX
XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match
XX Best Local Similarity 80.0%; Score 13.6; DB 1; Length 20;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 661 TACAAAGCGCAAGCAAGCT 680
XX ||||| ||||| ||||| |||||
XX 20 TACACAGCGAGGCAAGAT 1
XX
XX RESULT 1849
XX ABQ74294
XX ID ABQ74294 standard; DNA; 20 BP.
XX
XX ABQ74294;
XX
XX 14-OCT-2002 (first entry)
XX
XX Human leukocyte antigen DOB1 locus PCR primer DOB1-ex2F.
XX
XX Human leukocyte antigen; DOB1; DOA1; aspermia; examination; detection;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX
XX JP2002153300-A.
XX
XX 28-MAY-2002.
XX
XX 24-NOV-2000; 2000UP-00358486.
XX
XX 24-NOV-2000; 2000JP-00358486.
XX
XX (INOK/) INOKO H.
XX
XX WPI, 2002-552748/59.
XX
XX Examination of aspermia comprising investigating an allele with
XX correlation to aspermia if it is detected in the HLA-DQA1 locus.
XX
```

PS Example 2; Page 4; 7pp; Japanese.

XX The present invention describes a method for the examination of asperma

CC in which, if an allele showing correlation to asperma is detected in the

CC human leukocyte antigen (HLA)-DQA1 locus, it is investigated. Also

CC described is a method for the examination of asperma in which one of the

CC following (a) to (e) is investigated: (a) if the base sequence of the DNA

CC corresponding to codon 64 of HLA-DQA1 gene is AGA; (b) if the base

CC sequence of the DNA corresponding to codon 66 of HLA-DQA1 gene is ATG;

CC (c) if the base sequence of the DNA corresponding to codon 68 of HLA-DQA1

CC gene is GTG; (d) if the base sequence of the DNA corresponding to codon

CC 69 of HLA-DQA1 gene is GTG; or (e) if the base sequence of the DNA

CC corresponding to codon 71 of HLA-DQA1 gene is GTG. The method is useful

CC for the examination of asperma. The present sequence represents a PCR

CC primer for the HLA-DQA1 locus, which is used in an example from the

CC present invention

SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1427 TCTCCGCGAGAGATGCCATG 1446

DB 1 TCCCGCGAGAGATTTCGTG 20

RESULT 1850

AAS97894

ID AAS97894 standard; DNA; 20 BP.

XX AAS97894;

XX

DT 12-MAR-2002 (first entry)

DE Human SACL gene-specific oligonucleotide PCR primer #45.

XX

XX Human; mouse; SACL; carbohydrate; sweetener; ethanol; alcoholism; ss;

XX obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;

XX blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;

XX protein replacement therapy.

XX

OS Homo sapiens.

XX

XX WO200183749-A2.

XX

PD 08-NOV-2001.

XX

XX 25-APR-2001; 2001WO-US013387.

XX

XX 28-APR-2000; 2000US-0200794P.

XX

PR 28-JUL-2000; 2000US-0221419P.

XX

PR 10-NOV-2000; 2000US-0247443P.

XX

PA (WARNER) WARNER LAMBERT CO.

PA (MONE-) MONEILL CHEM SENSES CENT.

XX

PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;

PI Ohnen JD, Reed DR, Ross D, Toroff MG;

XX

XX WPI; 2002-075162/10.

XX

XX Novel isolated polypeptide comprising variant form of mouse or human SACL

XX polypeptide, and is associated with altered preference for carbohydrates

XX or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

XX

XX Claim 14; Page 91; 23pp; English.

XX

XX The invention relates to an isolated polypeptide, comprising a variant

XX form of mouse or human SACL polypeptide. The variant form is associated

XX with altered preference for carbohydrates, other sweeteners or ethanol.

XX

CC The polypeptide and its associated DNA sequence can be produced by

CC recombinant techniques and is useful for preventing obesity, diabetes or

CC alcoholism associated with SACL expression. The sequences are useful in

CC screening for drugs and sweeteners. Recombinant cell lines and transgenic

CC embryos may be used in screening for and identifying agents that induce

CC or repress function of SACL. Predisposition to diabetes, obesity or

CC alcoholism can be ascertained by testing any fluid or tissue of a human

CC (such as blood, pancreas or tongue) for sequence variations of the SACL

CC gene. A sequence variation of the SACL locus may indicate a

CC predisposition to diabetes, obesity and/or alcoholism and may provide a

CC diagnostic mark. The polynucleotide can be detected in a biological

CC sample by contacting the DNA with a probe to form a hybridisation complex

CC which is then detected. The sequences represent cDNA encoding human and

CC mouse SACL polypeptides and PCR primers specific for the SACL genes

XX

SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 851 TGGACAAAGACCTGAGCAG 870

DB 1 TGGAGTACGACCTGACCTG 20

RESULT 1851

ABL42954

ID ABL42954 standard; DNA; 20 BP.

XX ABL42954;

XX

DT 12-APR-2002 (first entry)

DE Maturation/activation dendritic cell expression gene PCR primer #328.

XX

XX Human; maturation/activation dendritic cell expression gene; maturation;

XX activation; dendritic cell; PCR primer; ss.

XX

OS Homo sapiens.

XX

XX Synthetic.

XX

PN JP2001327293-A.

XX

XX 27-NOV-2001.

XX

XX 22-MAY-2000; 2000JP-00150562.

XX

XX 22-MAY-2000; 2000JP-00150562.

XX

XX 22-MAY-2000; 2000JP-00150562.

XX

PA (KAGA-) KAGAKU GIUTSU SHINKO JIGYODAN.

XX

XX WPI; 2002-127070/17.

XX

XX Human maturation/activation dendritic cell expression gene group.

XX

XX Disclosure; Page 39; 41pp; Japanese.

XX

XX The present invention describes a human maturation/activation dendritic

XX cell (DC) expression gene group consisting of 100 genes which show the

XX highest expression among the genes expressed in human maturation/

XX activation DC. Also described are: (1) a protein expressed by the above

XX human maturation/activation DC expression gene; (2) an antibody against

XX the protein; and (3) an antagonist against the expression of each gene

XX belonging to the above gene group. The gene group is useful for the

XX treatment and the diagnosis of various human diseases related to human

XX DC. ABL42927 to ABL42936 represent PCR primers for human maturation/

XX activation DC expression genes, which are used in the exemplification of

XX the present invention

XX

SQ Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 481 CTACGAGCTGACATCGGCT 500
|||
Db 1 CTCACGAGCTGACCTCCACT 20

RESULT 1852
ABK30510
ID ABK30510 standard; DNA; 20 BP.
XX
AC ABK30510;
XX
DT 23-APR-2002 (first entry)
XX

DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124842.
XX
KW Human; glioma-associated oncogene-1 associated disease; infection;
KW inflammation; tumour formation; cytostatic; antiinflammatory; antisense;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PN US6329203-B1.
XX
PD 11-DEC-2001.
XX
PF 08-SEP-2000; 2000US-00657042.
XX
PR 08-SEP-2000; 2000US-00657042.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Wyatt J;
XX
DR WPI; 2002-138363/18.
XX

PT Novel antisense compounds targeted to nucleic acids encoding glioma-
PT associated oncogene-1, for modulating the gene expression and treating
PT diseases associated with expression of the oncogene in humans.
XX
PS Claim 1; Col 44; 43pp; English.

CC The present invention relates to antisense compounds and methods for
CC modulating the expression of human glioma-associated oncogene-1. The
CC antisense compounds, particularly antisense oligonucleotides, target and
CC inhibit the expression of human glioma-associated oncogene-1. The
CC antisense compounds are useful for inhibiting the expression of human
CC glioma-associated oncogene-1 in human cells or tissues and for treating
CC an animal, particularly a human suspected of having or being prone to a
CC disease or condition associated with expression of glioma-associated
CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
CC research reagent, e.g. prophylactically to prevent or delay infection,
CC inflammation or tumour formation. The antisense compounds are safely and
CC effectively administered to humans. ABK30509-ABK30586 represent the
CC antisense oligonucleotides of the invention which comprise a
CC phosphorothioate backbone
XX
XX

SEQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 340 GACTTGAAGATGGGCTCTGA 359
|||
Db 1 GAGTGAACATGCGCTCTCA 20

RESULT 1853
AB877759/C
ID AB877759 standard; DNA; 20 BP.
XX

AC AB877759;
XX
DT 13-DEC-2002 (first entry)
XX
DE Angiogenesis inhibitory oligonucleotide #243.
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasis; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX
OS Synthetic.
XX
PN WO200253141-A2.
XX
PD 11-JUL-2002.
XX
PF 14-DEC-2001; 2001WO-US048458.
XX
PR 14-DEC-2000; 2000US-0255534P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX
PI Bratzler RW;
XX
DR WPI; 2002-566690/60.
XX

PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
XX
PS Claim 2; Page 23; 276pp; English.

CC The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasis, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
XX

SEQ Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTCAGCGCGCGCTCCGCTC 574
|||
Db 20 CCGCGCGCGCGCGCGCGCTC 1

RESULT 1854
ABL39008/C
ID ABL39008 standard; DNA; 20 BP.
XX
AC ABL39008;
XX
DT 16-APR-2002 (first entry)
XX

DE Immunostimulatory nucleic acid SEQ ID NO: 410.
XX
KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;

```

XX  angio genesis; metastasis; cytostatic; ss.
XX  Synthetic.
XX  WO200197843-A2.
XX
XX  27-DEC-2001.
XX
XX  22-JUN-2001; 2001WO-US020154.
XX
XX  22-JUN-2000; 2000US-0213346P.
XX
XX  (IOWA ) UNIV IOWA RES FOUND.
XX
XX  Weiner G, Hartmann G;
XX
XX  WPI: 2002-154611/20.
XX
XX  Treating or preventing cancer, such as basal cell carcinoma, comprises
XX  administering immunostimulatory nucleic acids that induce expression of
XX  cell surface antigens and antibodies to a subject having or at risk of
XX  developing cancer.
XX
XX  Disclosure; Page 199; 312pp; English.
XX
XX  The present invention relates to methods for treating or preventing
XX  cancer, involving administering to a subject having or at risk of
XX  developing cancer immunostimulatory nucleic acids that induce expression
XX  of cell surface antigens and antibodies. The methods are useful for
XX  treating or preventing cancer such as basal cell carcinoma, bladder
XX  cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX  breast cancer, cervical cancer, colon and rectum cancer, connective
XX  tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX  cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX  Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX  cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX  cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX  present sequence is an immunostimulatory oligonucleotide described in the
XX  exemplification of the invention
XX
XX  Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
XX
SQ
Query Match          0.84; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0
CY      555 CCTCAGCGCGCGCGCTCCGTC 574
      ||| ||||| ||||| |||
DB      20 CCGCGCGCGCGCGCGCGCC 1
RESULT 1855
ABS65410
ID      ABS65410 standard; DNA; 20 BP.
XX
XX  ABS65410;
XX
XX  15-NOV-2002 (first entry)
XX
XX  Human/mouse Protein Phosphatase 2 antisense oligonucleotide #7.
XX
XX  Human; mouse; Protein Phosphatase 2 catalytic subunit alpha; diabetes;
XX  cancer; infection; inflammation; tumour formation; cytostatic;
XX  antidiabetic; phosphorothioate; ss.
XX
XX  Homo sapiens.
XX  Mus musculus.
XX
XX  Key Location/Qualifiers
XX  modified_base 1..20 /*tag= a
XX  /mod_base= OTHER
XX  /note= OTHER= Phosphorothioate internucleotide linkages.

```

| | |
|---|--|
| FT | bases 1-5 and 16-20 are 2'-methoxyethoxy (2'-MOE) bases. |
| FT | All cytidine bases are 5-methylcytidines" |
| XX | |
| PN | WO200264836-A1. |
| XX | |
| PD | 22-AUG-2002. |
| XX | |
| PF | 05-FEB-2002; 2002WO-US003848. |
| XX | |
| PR | 09-FEB-2001; 2001US-00780049. |
| XX | |
| PA | (ISIS-) ISIS PHARM INC. |
| XX | |
| PI | Monia BF, Wyatt JR; |
| XX | |
| DR | WPI; 2002-657604/70. |
| XX | |
| PT | New antisense oligonucleotides targeted to nucleic acid encoding Protein |
| FT | Phosphatase 2 catalytic subunit alpha, useful in treating diseases |
| PT | associated with the aberrant expression of Protein Phosphatase 2 |
| PT | catalytic subunit alpha. |
| XX | |
| PS | Claim 3; Page 94; 153pp; English. |
| XX | |
| CC | The present invention relates to antisense oligonucleotides and methods |
| CC | for modulating the expression of human or mouse Protein Phosphatase 2 |
| CC | catalytic subunit alpha. The antisense oligonucleotides are useful for |
| CC | inhibiting the expression of Protein Phosphatase 2 catalytic subunit |
| CC | alpha and for treating diseases or conditions associated with aberrant |
| CC | expression of Protein Phosphatase 2 catalytic subunit alpha. Such |
| CC | diseases include diabetes and cancer. The antisense oligonucleotides are |
| CC | also useful for diagnostics, therapeutics, and prophylaxis, e.g. to |
| CC | prevent or delay infection, inflammation or tumour formation. They are |
| CC | also useful as research reagents for distinguishing between functions of |
| CC | various members of a biological pathway. AB565400-AB565477 represent |
| CC | human or mouse Protein Phosphatase 2 catalytic subunit alpha antisense |
| CC | oligonucleotides which comprise a phosphorothioate backbone |
| XX | |
| SQ | Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other; |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| Best Local Similarity | 80.0%; Pred.No. 1.1e+03; |
| Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0; | |
| OY | 51 AGCAGTGGACTGCTGAAC 70 |
| | |
| Db | 1 AGCAGTGAAGCTGTTCAAC 20 |
| RESULT 1856 | |
| ABA97491/c | |
| ID | ABA97491 standard; DNA; 20 BP. |
| XX | |
| AC | ABA97491; |
| XX | |
| DT | 16-APR-2002 (first entry) |
| XX | |
| DE | ICAM-1 targeted antisense peptide nucleic acid SEQ ID NO: 37. |
| XX | |
| KW | Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical; |
| KW | cytostatic; viroinide; dermatological; antiasthmatic; cancer; antisense; |
| KW | viral infection; vltilligo; pigmentation disorder; asthma; ss. |
| OS | Unidentified. |
| OS | Synthetic. |
| XX | |
| PN | WO200179249-A2. |
| XX | |
| PD | 25-OCT-2001. |
| XX | |
| PF | 07-APR-2001; 2001WO-EP004027. |
| XX | |
| PR | 18-APR-2000; 2000DE-01019136. |
| XX | |

the compound specifically hybridises with and inhibits the expression of PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a compound of 8-50 nucleobases in length which specifically hybridises with an 8 nucleobase portion of an active site on a nucleic acid encoding PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues comprising contacting the cells or tissues with the compound; treating an animal having or suspected of having a disease or condition associated with PTP1B comprising administering the compound; (4) decreasing blood sugar levels in an animal comprising administering the compound; (5) preventing or delaying the onset of a disease or condition associated with PTP1B in an animal comprising administering the compound; and (6) preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering the compound. The compound is used to inhibit the expression of PTP1B in cells or tissues, to treat or prevent or delay the onset of a disease or condition associated with PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian cancer, chronic myeloid leukaemia and hyperproliferative diseases in an animal having or suspected of having the disease or condition, and for decreasing blood sugar levels or preventing or delaying the onset of an increase in blood glucose levels in an animal. The compound is also used in diagnostics, therapeutics, prophylaxis, and in research reagents and kits. The present sequence is an antisense compound of the invention targeting human PTP1B

Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

| | | | | |
|-----------------------|----------------|-------------------|----------|-----------|
| Query Match | 0.8% | Score 13.6 | DB 1 | Length 20 |
| Best Local Similarity | 80.0% | Pred. No. 1.1e+03 | | |
| Matches 16 | Conservative 0 | Mismatches 4 | Indels 0 | Gaps 0 |

```

QY      727 GAGGGGGACCCCTGCACCGC 746
          ||||| ||||| |||||
Db      20 GAGGTGTACCCCTGCAGAGC 1

```

RESULT 1859
ABN79624
ID ABN79624 standard; DNA; 20 BP.

| | |
|----|---------------------------|
| AC | ABN79624; |
| XX | |
| DT | 29-JUL-2002 (first entry) |

Human FasL chimeric oligonucleotide #14.

KW Human; immunosuppressive; antineoplastic; hepatotropic; cytostatic
KW vasotropic; hepatitis; cancer; allograft rejection; ds, Fas.

05 Homo sapiens

PN US2002004490-A1

PD 10-JAN-2002.
XX

09-MAR-2001; 20010800-S016669
XX
XX

PR 18-SEP-2000; 2000US-00665615.

PA (DEAN/) DEAN N M.

PA (DEAN/) DEAN N M.
PA (MARC/) MARCUSSEN E G
PA (WYAT/) WYATT J.
PA (ZHAN/) ZHANG H.

PI Dean NM, Marcusson EG, Wyatt J, Zhang H,
XX
DR MPI; 2002-204886/26.

PT Novel antisense compound targeted to nucleic acid encoding Fas, Fas ligand or Fas associated protein-1 is useful for inhibiting expression of Fas, Fas ligand, or Fas-1 in cells or tissues, and for treating hepatitis.

PS Example 3; Page 15; 84pp; English.

This invention relates to an antisense compound encoding Fas, Fas ligand or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated signalling is thought to be immunosuppressive, antiinflammatory, hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were designed to target human Fas. Oligonucleotides were synthesised as chimeric oligonucleotides and are useful for treating an animal having an autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition associated with apoptosis, allograft rejection, or ischemia reperfusion injury. Optionally, the above mentioned conditions are prevented by contacting the allograft with the antisense oligonucleotide. The oligonucleotides are used in diagnostics, therapeutics, prophylaxis and as research reagents and in kits. The oligonucleotides are also useful for research purposes. The present nucleotide sequence is related to human Fas

Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other

| | | | | |
|-----------------------|----------------|---------------|----------|-----------|
| Query Match | 0.8% | Score 13.6 | DB 1 | Length 20 |
| Best Local Similarity | 80.0% | Pred. 1.1e+03 | | |
| Matches 16 | Conservative 0 | Mismatches 4 | Indels 0 | Gaps 0 |

| | | | | |
|----|--|------|----------------------|----|
| Qy | | 1659 | CACCCCTCAGGGCAGCCC | 16 |
| | | | | |
| Db | | 1 | CCCTCTTCACATGGCAGCCC | 20 |

RESULT 1860
ABQ79630/c
ID ABQ79630 standard; DNA; 20 BP

| | |
|----|---------------------------|
| AC | ABQ79630; |
| XX | |
| DT | 25-NOV-2002 (first entry) |

1PFK-2-specific oligonucleotide S-1PFK-2 (A) (sense, position 35-55).

KW antiinflammatory; cytostatic; ss.
 KW human; phospholipase-2; 1pfr-2; antisense therapy; anticancer;
 KW antiinflammatory; cytostatic; ss.

US
OS
syncretic.
Homo sapiens

| | |
|----|--------------|
| PN | US6413939-B1 |
|----|--------------|

PD 02-JUL-2002.

PF 31-OCT-1997

PR 31-OCT-1997; 97US-00961578.
XX

PA (PICO-) PICOWER INST MEDICAL
XX

11 Bucara no, Chesney O, Mitchell RA,
XX

XX

PT Novel antisense oligonucleotides useful for treating inflammatory diseases or cancers, comprises complementary sequence of inducible human phosphofructokinase-2.

PS Example 4; Col 8; 28pp; English

The invention relates to antisense oligonucleotides of at least 10 bases complementary to inducible human phosphofructokinase-2 (iPFK-2) cDNA. The antisense oligonucleotides can be included in anticancer or antiinflammatory pharmaceutical compositions along with an oligonucleotide carrier. An iPFK-2 antagonist such as an enzymatic inhibitor, anti-iPFK-2 antibody, or iPFK-2 antisense molecule can be administered for treating inflammatory disease or rapidly-growing cancers. The present sequence represents an iPFK-2-specific sense oligonucleotide.

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1679 CCAACTACATCTTCCCTGCT 1698
DB 20 CCAACGGCATCTTCGGGCT 1
RESULT 1861
ABQ79631
ID ABQ79631 standard; DNA; 20 BP.
XX
AC ABQ79631;
XX
DT 25-NOV-2002 (first entry)
DE iPFK-2-specific oligo AS-iPFK-2 (A) (antisense, position 35-55).
XX
KW Human; phosphofructokinase-2; iPFK-2; antisense therapy; anticancer;
XX
KW antiinflammatory; cytosolic; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6413939-B1.
XX
PD 02-JUL-2002.
XX
PF 31-OCT-1997; 97US-00961578.
XX
PR 31-OCT-1997; 97US-00961578.
XX
PA (PICO-) PICOWER INST MEDICAL RES.
XX
PI Bucala RJ, Chesney J, Mitchell RA;
XX
DR WPI; 2002-641574/69.
XX
PT Novel antisense oligonucleotides useful for treating inflammatory
XX diseases or cancers, comprises complementary sequence of inducible human
XX phosphofructokinase-2.
XX
PS Claim 2; Col 25; 28pp; English.
XX
CC The invention relates to antisense oligonucleotides of at least 10 bases
XX complementary to inducible human phosphofructokinase-2 (iPFK-2) cDNA. The
XX antisense oligonucleotides can be included in anticancer or
XX antiinflammatory pharmaceutical compositions along with an
XX oligonucleotide carrier. An iPFK-2 antagonist such as an enzymatic
XX inhibitor, anti-iPFK-2 antibody, or iPFK-2 antisense molecule can be
XX administered for treating inflammatory disease or rapidly-growing
XX cancers. The present sequence represents an iPFK-2-specific antisense
XX oligonucleotide
XX
SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1679 CCAACTACATCTTCCCTGCT 1698
DB 1 CCAACGGCATCTTCGGGCT 20
RESULT 1862
ABL44330/C
ID ABL44330 standard; DNA; 20 BP.
XX

AC ABL44330;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1374.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA) RIKAGAKU KENKYUSHO.
XX (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.
XX
PS Claim 4; Page 32; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multiwell plates numbered for discrimination are mixed in each of the
XX multiwell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multiwell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multiwell
XX plates; (e) the clones in the multiwell plates of the specified
XX discrimination Nos. are mixed respectively in each wells of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multiwell
XX plates are specified from the detected result; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention
XX
SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 397 GAGTGCACTCTCCAGTGAG 416
DB 20 GAGTGCAATCTGCACTGAG 1
RESULT 1863
ABL43558/C
ID ABL43558 standard; DNA; 20 BP.
XX
AC ABL43558;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:602.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX


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XX OS Homo sapiens.
XX PN JP2001321190-A.
XX PD 20-NOV-2001.
XX PF 12-MAR-2001; 2001JP-00068285.
XX PR 10-MAR-2000; 2000JP-0006716.
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX DR WPI; 2002-144136/19.
XX PT Arraying genome clones.
XX PS Claim 4; Page 16; 528pp; Japanese.
XX CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination Nos. of the multiwell
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 519 GAGCTGACCCCTCATAGCC 538
Db ||||| ||||| |||||
20 GAGGATGACGCTGAGAGGCC 1
RESULT 1864
ABT13935/c
ID ABT13935 standard; DNA; 20 BP.
XX AC ABT13935;
XX DT 13-FEB-2003 (first entry)
XX DE Human helicase-moi inhibiting oligonucleotide #60.
XX KW Human; antisense gene therapy; phosphorothioate backbone;
XX KW antisense oligonucleotide; helicase-moi gene; inflammation; ss;
XX KW helicase-moi-associated condition; infection; tumour formation;
XX KW 2-MOE nucleotide; 2'-methoxyethyl nucleotide.
XX OS Homo sapiens.
XX PN US6444466-B1.
XX PD 03-SEP-2002.
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XX PF 10-MAY-2001; 2001US-00853768.
XX PR 10-MAY-2001; 2001US-00853768.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Ward DT, Watt AT;
XX DR WPI; 2002-749291/81.
XX PT Novel antisense compound for modulating expression of human helicase-moi
XX PT and for treating inflammation, specifically hybridizes to a specific
XX PT region in nucleic acid molecule encoding the human helicase-moi.
XX PS Example 15; Col 45-46; 52pp; English.
XX CC The invention comprises antisense oligonucleotides which are targeted to
XX CC the coding region of the human helicase-moi gene. The antisense
XX CC oligonucleotides of the invention are useful for inhibiting the
XX CC expression of human helicase-moi in cells or tissues, and for treating a
XX CC helicase-moi-associated condition. The antisense oligonucleotides of the
XX CC invention may also be used to delay infection, inflammation and tumour
XX CC formation. The present DNA sequence represents a human helicase-moi gene
XX CC antisense oligonucleotide of the invention. NOTE: The present DNA
XX CC sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
XX CC methoxyethyl (2'-MOE) nucleotides
SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1380 GGCGGACTCTCTACCAAGC 1399
Db ||||| ||||| |||||
20 GGACTACTCTCATACCAAGC 1
RESULT 1865
AAI67702
ID AAI67702 standard; DNA; 20 BP.
XX AC AAI67702;
XX DT 27-FEB-2002 (first entry)
XX DE SHH patched receptor (Ptc) cDNA amplifying forward primer.
XX KW Cell culturing; embryonic stem; ES; central nervous system; Ptc; Shh;
XX KW dopaminergic; cholinergic; serotonergic; antiparkinsonian; nootropic;
XX KW neuroprotective; anticonvulsant; tranquilizer; vulnerary; neuroleptic;
XX KW cerebroprotective; cell therapy; gene therapy; CNS; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200183715-A2.
XX PD 08-NOV-2001.
XX PF 01-MAY-2001; 2001WO-US014051.
XX PR 01-MAY-2000; 2000US-0201005P.
XX PA (USGO ) US GOVERNMENT.
XX PA (LEES/) LEE S.
XX PA (LUME/) LUMELSKY N.
XX PA (STUD/) STUDER L.
XX PA (MCKA/) MCKAY R D G.
XX PI Lee S, Lumelsky N, Studer L, McKay RDG;
XX DR WPI; 2002-049345/06.
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XX Culturing cells such as neuronal cells for use in treating neurological
PT disorders, comprises generating embryoid bodies from undifferentiated
PT embryonic stem cells, selecting precursor cells, expanding and
PT differentiating them.
PS Example 10; Page 40; 66pp; English.
XX
CC The invention provides a method of culturing cells. The method involves
CC expanding a culture of undifferentiated embryonic stem (ES) cells,
CC generating embryoid bodies (EB), culturing the bodies to select for
CC central nervous system (CNS) precursor cells (PC), culturing PC in an
CC expansion medium comprising a neurologic factor, and differentiating and
CC culturing the expanded PC to form a culture of differentiated neuronal
CC cells. The method is useful for culturing undifferentiated ES cells to
CC form differentiated neuronal cells which are useful for treating a
CC neurological disorder, especially Parkinson's disease in a patient. A
CC gene product such as tyrosine hydroxylase, nerve growth factor (NGF),
CC brain derived neurotrophic factor (BDNF), bFGF, glial derived growth
CC factor (GDNF) NT-3, and NT-4/5 can be introduced into a brain of a
CC subject. The method is useful for culturing dopaminergic, cholinergic and
CC serotonergic neuronal cells. The differentiated neuronal cells are useful
CC for treating neurological disorders such as Huntington's disease,
CC Alzheimer's disease, multiple sclerosis, severe seizure disorders
CC including epilepsy, familial dysautonomia as well as injury or trauma to
CC the nervous system such as neurotoxic injury or disorders of mood and
CC behavior such as addiction and schizophrenia, cerebrovascular disorders
CC such as stroke and CNS disorders resulting from aging. Assays are useful
CC for developing drugs capable of regulating the survival, proliferation or
CC genesis of neuronal cells and to screen for antagonist or agonist of
CC dopamine or serotonin. Cell cultures comprising 50%-85% neurons which
CC comprise 20-40% dopaminergic neurons and 1-3% astrocytes are useful for
CC studying the mechanism of neurotransmitter synthesis and release, and the
CC particularly for serotonin and dopamine, neuronal cell survival, and the
CC electrophysiological properties of differentiated neuronal cells.
CC Sequences AAI67692-721 represent gene-specific PCR primers for CNS and
CC dopaminergic specific regulatory genes, used for examining the
CC developmental progression of ES cells
XX
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 614 CCTACATTAAAGCTGACAAA 633
DB 1 CCTCCTTACGGTGCACAAA 20
RESULT 1866
ABL46178/C
ID ABL46178 standard; DNA; 20 BP.
XX
AC ABL46178;
XX
DT 26-APR-2002 (first entry)
DE Human ICAM-1 antisense oligonucleotide ISIS 1939 SEQ ID NO:145.
XX
KW Nucleic acid accessible hybridisation site; detection; hybridisation;
KW characterisation; identification; nucleic acid structure; diagnosis;
KW PCR primer; probe; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
PV WO200198537-A2.
XX
PD 27-DEC-2001.
XX
PF 15-JUN-2001; 2001WO-US019401.
XX

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```

PR 17-JUN-2000; 2000US-0212308P.
PR 15-JUN-2001; 2001US-00212308.
XX
PA (THIR-) THIRD WAVE TECHNOLOGIES INC.
XX
PI Lyamichev V, Allawi H, Dong F, Neri BP, Vener IT;
XX
DR WPI; 2002-049698/06.
XX
PT Identifying oligonucleotides hybridizing to nucleic acids containing
PT secondary structure, useful in clinical diagnosis, comprises identifying
PT primers that interact with the target to form an extension product under
PT amplification conditions.
PS Example 17; Page 382; 409pp; English.
XX
CC The present invention describes a method for identifying oligonucleotides
CC with desired hybridisation properties to nucleic acid targets containing
CC secondary structure. The method comprises amplifying a target nucleic
CC acid having at least one accessible and one inaccessible site. Primers
CC that form an extension product are identified as the oligonucleotides
CC which can interact with the folded target nucleic acid. Oligonucleotides
CC from the present invention can be used in novel detection methods for
CC clinical diagnostic purposes, including the detection and identification
CC of pathogenic organisms (e.g. HIV). The method allows the ability to
CC rapidly analyse nucleic acid structures. ABL46034 to ABL46367 represent
CC sequences used in the exemplification of the present invention
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 226 GAGAGTGTGTGTGTGCGCG 245
DB 20 GAGAGGGGAAAGTGTGTGCGG 1
RESULT 1867
ABK24601/C
ID ABK24601 standard; DNA; 20 BP.
XX
AC ABK24601;
XX
DT 09-APR-2002 (first entry)
DE EIF2AK3 gene sequencing primer #17.
XX
KW Human; EIF2AK3; antidiabetic; osteopathic; antiarthritic; hepatotropic;
KW nephrotropic; noctropic; diabetes; Wolcott-Rallison syndrome; WRS;
KW osteoporosis; arthritis; hepatic dysfunction; nephropathy;
KW renal dysfunction; mental retardation; primer; ss;
KW eukaryotic initiation factor 2 alpha kinase 3.
XX
OS Homo sapiens.
XX
OS WO200190371-A1.
XX
PN 29-NOV-2001.
XX
PD 23-MAY-2001; 2001WO-IB001153.
XX
PF 23-MAY-2000; 2000EP-00401436.
XX
PR 02-OCT-2000; 2000EP-00402707.
XX
PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PA (NAGE-) CENT NAT GENOTYPAGE.
XX
PI Julier C, Delepine M, Nicolino M;
XX
DR WPI; 2002-122021/16.
XX

```

PT New mutated eukaryotic initiation factor 2 alpha kinase 3 genes and
PT polypeptides in patients with Wolcott-Rallison syndrome, useful for
PT preventing or treating e.g. diabetes, osteoporosis, arthritis or mental
PT retardation.
XX
PS Example 4; Page 31; 93pp; English.
XX
CC The invention relates to an isolated variant of a mammal genomic sequence
CC of the gene coding for the translation initiation factor 2 alpha kinase 3
CC (EIF2AK3). The EIF2AK3 nucleic acid variant is useful for the production
CC of a recombinant or synthetic polypeptide, and for screening compounds
CC capable of modulating EIF2AK3. The nucleic acid is also useful for
CC screening or diagnosing the diseases cited below. The nucleic acid of may
CC be used as sense or anti-sense oligonucleotide. The nucleic acid may also
CC be used as a primer or a probe, for detecting and/or amplifying a nucleic
CC acid sequence. The compound is useful as a medication, particularly for
CC preventing and/or treating diabetes and/or pathology related to WRS, e.g.
CC type 1 diabetes, type 2 diabetes, the others forms of diabetes,
CC osteoporosis, arthritis, hepatic dysfunction, nephropathies or other
CC renal dysfunction, or mental retardation. The cell the mammal or the
CC polypeptide is useful for studying the expression or the activity of the
CC EIF2AK3 protein, and the direct or indirect interactions between the
CC EIF2AK3 protein and chemical or biochemical compounds, which may be
CC involved in the activity of the EIF2AK3 protein. The cell or polypeptide
CC is also useful for screening chemical or biochemical compounds capable of
CC interacting directly or indirectly with the EIF2AK3 protein, and/or
CC capable of modulating the expression or the activity of the EIF2AK3
CC protein. ABK24521-ABK24624 represent human EIF2AK3 coding sequences and
CC PCR primers of the invention
XX
SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 532 AATAGCCCATCTTGACAA 551
DB 20 AATAGCCCGCTTTACTA 1
XX
RESULT 1868
ABT06761/c
ID ABT06761 standard; DNA; 20 BP.
XX
AC ABT06761;
XX
DT 07-NOV-2002 (first entry)
XX
DE Nucleic acid detection and discrimination related oligo SEQ ID No 104.
XX
KM Hybridising; quantification; detection; synthesis; amplification;
KM oligonucleotide; ds.
XX
OS Unidentified.
XX
XX WO200257479-A2.
XX
XX 25-JUL-2002.
XX
PD 27-DEC-2001; 2001WO-US050460.
PF 27-DEC-2000; 2000US-00748146.
PR 23-OCT-2001; 2001US-0330468P.
XX
XX (INVT-) INVITROGEN CORP.
XX
XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darflier M,
PI Gebeyehu G, Astatke M;
XX
XX WPI; 2002-627370/67.
XX
CC Composition comprising nucleic acid molecules and a oligonucleotide

PT capable of hybridizing with a portion of nucleic acid, and comprises a
PT modified nucleotide at or near the 3'-terminal nucleotide.
XX
XX
PS Example 29; Page 158; 307pp; English.
XX
CC The invention relates to a composition comprising one or more nucleic
CC acid molecules and at least one oligonucleotide, where at least a portion
CC of the oligonucleotide is capable of hybridizing with at least a portion
CC of the nucleic acid molecule and where the oligonucleotide comprises a
CC modified nucleotide at or near the 3'-terminal nucleotide. The various
CC analogue oligonucleotides are useful for quantification or detection of
CC one or more target nucleic acid molecules in a sample during nucleic acid
CC synthesis or amplification. The analogues are also useful for determining
CC the presence or absence of one or more particular nucleotides at a
CC specific position or positions in a target nucleic acid molecule. The
CC analogue oligonucleotides can also be useful for synthesizing or
CC amplifying one or more nucleic acid molecules, by mixing one or more
CC nucleic acid templates or targets with the analogue oligonucleotides, and
CC incubating the mixture to synthesise or amplify one or more nucleic acid
CC molecules complementary to all or a portion of the templates or targets.
CC This polynucleotide sequence represents a nucleic acid detection and
CC discrimination related oligonucleotide of the invention
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 948 CTACTGCCACCGGACGAGG 967
DB 20 CTACAGCCACCACGAGAGG 1
XX
RESULT 1869
ABT06751/c
ID ABT06751 standard; DNA; 20 BP.
XX
AC ABT06751;
XX
DT 07-NOV-2002 (first entry)
XX
DE Nucleic acid detection and discrimination related oligo SEQ ID No 94.
XX
KM Hybridising; quantification; detection; synthesis; amplification;
KM oligonucleotide; ds.
XX
OS Unidentified.
XX
XX WO200257479-A2.
XX
XX 25-JUL-2002.
XX
PD 27-DEC-2001; 2001WO-US050460.
PF 27-DEC-2000; 2000US-00748146.
PR 23-OCT-2001; 2001US-0330468P.
XX
XX (INVT-) INVITROGEN CORP.
XX
XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darflier M,
PI Gebeyehu G, Astatke M;
XX
XX WPI; 2002-627370/67.
XX
XX
XX Composition comprising nucleic acid molecules and a oligonucleotide
XX capable of hybridizing with a portion of nucleic acid, and comprises a
XX modified nucleotide at or near the 3'-terminal nucleotide.
XX
PS Example 29; Fig 36; 307pp; English.
XX
XX The invention relates to a composition comprising one or more nucleic
XX acid molecules and at least one oligonucleotide, where at least a portion

CC of the oligonucleotide is capable of hybridizing with at least a portion
CC of the nucleic acid molecule and where the oligonucleotide comprises a
CC modified nucleotide at or near the 3'-terminal nucleotide. The various
CC analogue oligonucleotides are useful for quantification or detection of
CC one or more target nucleic acid molecules in a sample during nucleic acid
CC synthesis or amplification. The analogues are also useful for determining
CC the presence or absence of one or more particular nucleotides at a
CC specific position or positions in a target nucleic acid molecule. The
CC analogue oligonucleotides can also be useful for synthesizing or
CC amplifying one or more nucleic acid molecules, by mixing one or more
CC nucleic acid templates or targets with the analogue oligonucleotides, and
CC incubating the mixture to synthesise or amplify one or more nucleic acid
CC molecules complementary to all or a portion of the templates or targets.
CC This polynucleotide sequence represents a nucleic acid detection and
CC discrimination related oligonucleotide of the invention
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 948 CTACTGCCCGCGAGAGG 967
DB 20 CTACAGCCACCATGAGAGG 1
RESULT 1870
ABT06760/c
ID ABT06760 standard; DNA; 20 BP.
XX ABT06760;
AC
XX
AC ABT06760;
XX
DT 07-NOV-2002 (first entry)
XX
XX
DE Nucleic acid detection and discrimination related oligo SEQ ID No 103.
XX
XX Hybridizing; quantification; detection; synthesis; amplification;
KM oligonucleotide; ds.
XX
XX Unidentified.
OS
XX WO200257479-A2.
PN
XX 25-JUL-2002.
PD
XX 27-DEC-2001; 2001WO-US050460.
PF
XX 27-DEC-2000; 2000US-00748146.
XX 23-OCT-2001; 2001US-0330468P.
PR
XX (INVT-) INVITROGEN CORP.
PA
XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darfler M,
PI Gebejehu G, Astatke M;
XX WPI; 2002-627370/67.
DR
XX Composition comprising nucleic acid molecules and a oligonucleotide
PT capable of hybridizing with a portion of nucleic acid, and comprises a
XX modified nucleotide at or near the 3'-terminal nucleotide.
XX
XX Example 29; Page 158; 307pp; English.
XX
XX The invention relates to a composition comprising one or more nucleic
CC acid molecules and at least one oligonucleotide, where at least a portion
CC of the oligonucleotide is capable of hybridizing with at least a portion
CC of the nucleic acid molecule and where the oligonucleotide comprises a
CC modified nucleotide at or near the 3'-terminal nucleotide. The various
CC analogue oligonucleotides are useful for quantification or detection of
CC one or more target nucleic acid molecules in a sample during nucleic acid
CC synthesis or amplification. The analogues are also useful for determining
CC the presence or absence of one or more particular nucleotides at a

CC specific position or positions in a target nucleic acid molecule. The
CC analogue oligonucleotides can also be useful for synthesizing or
CC amplifying one or more nucleic acid molecules, by mixing one or more
CC nucleic acid templates or targets with the analogue oligonucleotides, and
CC incubating the mixture to synthesise or amplify one or more nucleic acid
CC molecules complementary to all or a portion of the templates or targets.
CC This polynucleotide sequence represents a nucleic acid detection and
CC discrimination related oligonucleotide of the invention
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 948 CTACTGCCCGCGAGAGG 967
DB 20 CTACAGCCACCATGAGAGG 1
RESULT 1871
ABQ62337
ID ABQ62337 standard; DNA; 20 BP.
XX ABQ62337;
AC
XX 16-AUG-2002 (first entry)
DT
XX
XX Human syntaxin 4 interacting protein antisense oligonucleotide 76.
DE
XX Human; antisense gene therapy; Syntaxin 4 interacting protein; ss;
KM Antisense oligonucleotide; diabetes; obesity; skeletal muscle disorder;
KM inflammation; tumour formation; phosphorothioate backbone;
XX 2'-O-methoxyethyl wing.
XX
XX Homo sapiens.
OS
XX WO200224864-A2.
PN
XX 28-MAR-2002.
PD
XX 19-SEP-2001; 2001WO-US029251.
PF
XX 22-SEP-2000; 2000US-00668313.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Monia BP, Freier SM, Wyatt JR;
PI WPI; 2002-404952/43.
DR
XX Novel antisense compound that hybridizes and inhibits nucleic acid
PT molecule encoding Syntaxin 4 interacting protein, useful for treating
XX diabetes, obesity and skeletal muscle disorder.
XX
XX Claim 3; Page 84; 154pp; English.
XX
XX The invention comprises antisense oligonucleotides designed to inhibit
CC expression of Syntaxin 4 interacting protein. The antisense
CC oligonucleotides of the invention are useful for inhibiting the
CC expression of Syntaxin 4 interacting protein in cells or tissues. The
CC antisense oligonucleotides are also useful for treating an animal having
CC a disease or condition associated with Syntaxin 4 interacting protein
CC (e.g. diabetes, obesity or a skeletal muscle disorder). The antisense
CC oligonucleotides can also be used to prevent or delay infection,
CC inflammation and tumour formation. The present DNA sequence represents a
CC human Syntaxin 4 interacting protein antisense oligonucleotide. NOTE: The
CC present sequence contains a phosphorothioate backbone and 2'-O-
XX methoxyethyl wings
SQ Sequence 20 BP; 11 A; 2 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1303 GAGTTCAGACATACACTA 1322

DB 1 GATTTCAAAAATATACCTA 20

RESULT 1872

ABZ31505

ID ABZ31505 standard; DNA; 20 BP.

AC ABZ31505;

DT 30-JAN-2003 (first entry)

DE Candida albicans GRACE strain PCR primer SEQ ID NO 5724.

XX Fungus; Yeast; tetracycline; promoter; GRACE strain; biosynthesis;

KW signal transduction; DNA replication; cell division; growth;

XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.

OS Candida albicans.

XX WO200253728-A2.

PF 26-DEC-2001; 2001WO-US049486.

PR 29-DEC-2000; 2000US-0259128P.

PR 20-FEB-2001; 2001US-00792024.

PR 22-AUG-2001; 2001US-0314050P.

XX (ELIT-) ELITRA PHARM INC.

PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

DR WPI; 2002-566694/60.

PT Constructing strains for identifying gene products as effective targets
PT for therapeutic intervention, by inactivating in the strain one allele of
PT a gene and placing other allele of the gene under conditional expression.

PS Claim 36; SEQ ID NO 5724; 167bp + Sequence Listing; English.

XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an

XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous

XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal

XX cells in which both alleles of a gene are modified. The diploid fungal
XX cells having both alleles modified are useful for identifying a gene that

XX is essential to the survival or growth of a fungus, a gene that
XX contributes to the virulence and/or pathogenicity of a fungus, a gene

XX that contributes to the resistance of a diploid fungus to an antifungal
XX agent, an antifungal agent that inhibits the growth of a diploid fungus
XX and for identifying a therapeutic agent for treatment of a mammalian

XX disease. (M1) is useful for identifying a compound which modulates the
XX activity of a gene product, preferably enzymatic activity, carbon

XX compound catabolism, biosynthetic, transporter, transcriptional,
XX translational, signal transduction, DNA replication and cell division

XX activity. The method is useful for identifying a compound having the
XX ability to inhibit growth or proliferation of C. albicans cells and for

XX treating infection by C. albicans. The present sequence is that of a PCR
XX primer used in the method of the invention. Note: The sequence data for
XX this patent is not represented in the printed specification but is based
XX on sequence information supplied to Derwent by the European Patent Office

XX Sequence 20 BP; 0 A; 0 C; 11 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 231 TGGTGTGTGTGGCCGCACTG 250

DB 1 TGGTGTGTGTGTGTGTG 20

RESULT 1873

ABA99824

ID ABA99824 standard; DNA; 20 BP.

AC ABA99824;

DT 11-JUN-2002 (first entry)

DE Murine capn12 exon 19 splice donor site.

XX Calpain protease; murine; gene therapy; screening; diagnosis; capn12; ss.

XX Mus sp.

OS Mus sp.

XX Key

FT exon

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

FT intron

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FT intron

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FT intron

FT intron

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ID  ABN97923 standard; DNA; 20 BP.
XX
XX  ABN97923;
AC
XX  30-JUL-2002 (first entry)
DT
XX
DE  GAPDH amplification control forward primer.
XX
XX  NEBD-1; cytosolic; human; ss; PCR; primer.
XX
XX  Homo sapiens.
XX
XX  WO200226818-A2.
XX
XX  04-APR-2002.
XX
XX  26-SEP-2001; 2001WO-US030287.
XX
XX  27-SEP-2000; 2000US-0236359P.
XX
XX  30-JAN-2001; 2001WO-US000661.
XX
XX  30-JAN-2001; 2001WO-US000662.
XX
XX  30-JAN-2001; 2001WO-US000663.
XX
XX  30-JAN-2001; 2001WO-US000664.
XX
XX  30-JAN-2001; 2001WO-US000665.
XX
XX  30-JAN-2001; 2001WO-US000666.
XX
XX  30-JAN-2001; 2001WO-US000667.
XX
XX  30-JAN-2001; 2001WO-US000668.
XX
XX  30-JAN-2001; 2001WO-US000669.
XX
XX  30-JAN-2001; 2001WO-US000670.
XX
XX  01-JUN-2001; 2001US-00872462.
XX
XX  (AEOM-) AEOMICA INT.
XX
XX  Gu Y, Corrigan A;
XX
XX  WPI; 2002-426011/45.
XX
XX  Polynucleotide and polypeptide of human NEBD-1 useful for diagnosing,
XX  treating or preventing a disorder associated with decreased or increased
XX  expression or activity of the polypeptide.
XX
XX  Example 2; Page 94; 190pp; English.
XX
XX  This invention relates to an isolated polynucleotide encoding human NEBD-
XX  1, which is cytosolic in its action. The polynucleotide is useful for
XX  diagnosing diseases caused by mutation in human NEBD-1, and for
XX  diagnosing or monitoring diseases caused by altered expression of human
XX  NEBD-1. Fragments of NEBD-1 are useful as hybridisation probes and
XX  primers, and to direct expression or synthesis of epitopic or immunogenic
XX  protein fragments. The proteins are useful as therapeutic supplement in
XX  patients with specific deficiency in human NEBD-1 production, and for
XX  treating subjects preferably with defects in NEBD-1. The present sequence
XX  is a PCR primer related to human NEBD-1
XX
XX  Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 621 TAAGCTGACAACTGGGCG 640
DB 20 TGAGCTTGACAAAGTGTG 1
XX
XX  RESULT 1875
XX  ID ABK43252/C
XX  ID ABK43252 standard; DNA; 20 BP.
XX
XX  ABK43252;
AC
XX  05-JUN-2002 (first entry)
DT
XX

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DE  Human HKNGL exon 9 PCR primer #1.
XX
XX  HKNGL; ss; chromosome 18p; bipolar affective disorder; BAD; PCR; primer;
XX  severe bipolar affective (mood) disorder; BP-1; schizophrenia;
XX  Hong Kong new gene 1; anti manic; antidepressant; neuroleptic.
XX
XX  Homo sapiens.
XX
XX  WO200210366-A2.
XX
XX  07-FEB-2002.
XX
XX  02-AUG-2001; 2001WO-US024417.
XX
XX  02-AUG-2000; 2000US-00631275.
XX
XX  28-NOV-2000; 2000US-00722544.
XX
XX  (MILL-) MILLENNIUM PHARM INC.
XX  (REGC ) UNIV CALIFORNIA.
XX
XX  Chen H, Freimer NB, Novak T;
XX
XX  WPI; 2002-195962/25.
XX
XX  New nucleic acid molecule Hong Kong New Gene 1 (HKNGL), useful for
XX  screening for molecules which modulate HKNGL expression for the treatment
XX  of bipolar disorder and schizophrenia.
XX
XX  Disclosure; Page 74; 367pp; English.
XX
XX  The invention relates to an isolated nucleic acid molecule comprising a
XX  nucleotide sequence that encodes a Hong Kong New Gene (HKNGL) 1 gene
XX  product. The human gene for HKNGL is located on chromosome 18p in an area
XX  associated with bipolar affective disorder, BAD. Also included are an
XX  expression vector comprising the nucleic acid, a host cell expressing the
XX  nucleic acid, an anti-HKNGL antibody, a method of identifying modulators
XX  of HKNGL, and identifying an individual (at risk of) having HKNGL-
XX  mediated disorder comprising detecting the presence or absence of a
XX  polymorphism that correlates with an HKNGL allele associated with the
XX  disorder, where the presence of the polymorphism indicates that the
XX  individual (is at risk of) having HKNGL-mediated disorder. A (small
XX  molecule) compound which modulates (inhibits or potentiates) expression
XX  of a HKNGL gene or gene product in a human individual is useful for the
XX  treatment of a HKNGL-mediated disorder such as bipolar affective disorder
XX  (BAD), severe bipolar affective (mood) disorder (BP-1) and schizophrenia.
XX  The present sequence is PCR primer which amplifies a HKNGL exonic
XX  sequence
XX
XX  Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 156 GTCATGACACTCCGAGGTG 175
DB 20 GTCATGAACACTTGAGGCTG 1
XX
XX  RESULT 1876
XX  ID ABN80949
XX  ID ABN80949 standard; DNA; 20 BP.
XX
XX  ABN80949;
AC
XX  15-JUL-2002 (first entry)
DT
XX
XX  Mouse caspase 7 phosphorothioate oligonucleotide SEQ ID NO:127.
XX
XX  Caspase 7; antisense modulation; antiinflammatory; cytosolic;
XX  antisense therapy; caspase 7 inhibitor; inflammatory condition;
XX  hyperproliferative disorder; cancer; bone metabolism; infection;
XX  cholesterol disorder; inflammation; tumour; phosphorothioate; ss.
XX

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| XX | OS | Mus musculus. | Location/Qualifiers |
|-------------|--|---|--|
| XX | XX | Key | 1. .20 |
| FT | FT | modified_base | /+tag= a |
| FT | FT | | /mod_base= OTHER |
| FT | FT | | /note= "Phosphorothioate linkages" |
| FT | FT | modified_base | 1. .5 |
| FT | FT | | /+tag= b |
| FT | FT | | /mod_base= OTHER |
| FT | FT | modified_base | /note= "2'-methoxyethyl (2'-MOE) wing" |
| FT | FT | | 16. .20 |
| FT | FT | | /+tag= c |
| FT | FT | | /mod_base= OTHER |
| PN | WO200222640-A1. | | /note= "2'-methoxyethyl (2'-MOE) wing" |
| XX | XX | 21-MAR-2002. | |
| XX | XX | 10-SEP-2001; 2001WO-US028232. | |
| XX | XX | 11-SEP-2000; 2000US-00659860. | |
| XX | XX | (ISIS-) ISIS PHARM INC. | |
| XX | XX | Zhang H, Watt AT; | |
| PI | WPI; 2002-404806/43. | | |
| DR | Novel antiense compounds targeted to nucleic acids encoding caspase 7, | | |
| XX | PT | for modulating gene expression and treating diseases associated with | |
| PT | expression of caspase 7 in humans. | | |
| XX | PS | Claim 3; Page 88; 138pp; English. | |
| XX | XX | The present invention describes a compound (I) 8-50 nucleobases in length | |
| CC | CC | targeted to a nucleic acid molecule encoding caspase 7, which | |
| CC | CC | specifically hybridizes with and inhibits the expression of caspase 7. | |
| CC | CC | (I) has antiinflammatory and cytostatic activities, and can be used in | |
| CC | CC | antisense therapy and as an inhibitor of caspase 7 expression. (I) is | |
| CC | CC | useful for inhibiting the expression of caspase 7 in human cells or | |
| CC | CC | tissues, and for treating a human having a disease or condition | |
| CC | CC | associated with caspase 7 including inflammatory condition, | |
| CC | CC | hyperproliferative disorder (cancer), or bone metabolism or cholesterol | |
| CC | CC | disorder. (I) is useful for diagnostics, therapeutics, prophylaxis and as | |
| CC | CC | research reagent and kits. (I) is useful prophylactically to prevent or | |
| CC | CC | delay infection, inflammation or tumour formation. The present sequence | |
| CC | CC | represent a mouse caspase 7 inhibiting chimERIC phosphorothioate | |
| CC | CC | oligonucleotide having 2'-MOE wings and a deoxy gap, which is used in an | |
| CC | CC | example from the present invention | |
| XX | SQ | Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other; | |
| QY | Query Match | 0.8%; Score 13.6; DB 1; Length 20; | |
| XX | Best Local Similarity | 80.0%; Pred. No. 1.1e+03; | |
| XX | Matches | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0 | |
| Db | 710 TCAGACTGGACATGAAG 729 | | |
| | 1 TCAGACTGGACTCGAAGTG 20 | | |
| RESULT 1877 | | | |
| ABN809377c | | | |
| ID | ABN80937 standard; DNA; 20 BP. | | |
| AC | ABN80937; | | |
| XX | | | |
| DT | 15-JUL-2002 (first entry) | | |
| XX | | | |
| XX | Mouse caspase 7 phosphorothioate oligonucleotide SEQ ID NO:115. | | |

| | | | |
|-----------------------|---|---------------|--|
| XX | | Mus musculus. | |
| OS | | | |
| XW | Caspase 7; antisense modulation; antiinflammatory; cytosolic; | | |
| KW | antisense therapy; caspase 7 inhibitor; inflammatory condition; | | |
| KM | hyperproliferative disorder; cancer; bone metabolism; infection; | | |
| KX | cholesterol disorder; inflammation; tumour; phosphorochioate; ss. | | |
| XX | | | |
| Key | Location/Qualifiers | | |
| FT | modified_base | 1..20 | |
| FT | /tag= a | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "Phosphorochioate linkages" | | |
| FT | modified_base | 1..5 | |
| FT | /tag= b | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "2'-methoxyethyl (2'-MOE) wing" | | |
| FT | modified_base | 16..20 | |
| FT | /tag= c | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "2'-methoxyethyl (2'-MOE) wing" | | |
| PN | WO200222640-A1. | | |
| PD | 21-MAR-2002. | | |
| XX | | | |
| PF | 10-SEP-2001; 2001WO-US028232. | | |
| XX | | | |
| PR | 11-SEP-2000; 2000US-00659860. | | |
| XX | | | |
| PA | (ISIS-) ISIS PHARM INC. | | |
| PI | Zhang H, Watt AT; | | |
| XX | | | |
| DR | WPI; 2002-404806/43. | | |
| XX | | | |
| PT | Novel antisense compounds targeted to nucleic acids encoding caspase 7, | | |
| PT | for modulating gene expression and treating diseases associated with | | |
| XX | expression of caspase 7 in humans. | | |
| PS | Claim 3; Page 88; 138bp; English. | | |
| XX | | | |
| CC | The present invention describes a compound (I) 8-50 nucleobases in length | | |
| CC | targeted to a nucleic acid molecule encoding caspase 7, which | | |
| CC | specifically hybridises with and inhibits the expression of caspase 7. | | |
| CC | (I) has antinflammatory and cytostatic activities, and can be used in | | |
| CC | antisense therapy and as an inhibitor of caspase 7 expression. (I) is | | |
| CC | useful for inhibiting the expression of caspase 7 in human cells or | | |
| CC | tissues, and for treating a human having a disease or condition | | |
| CC | associated with caspase 7 including inflammatory condition, | | |
| CC | hyperproliferative disorder (cancer), or bone metabolism or cholesterol | | |
| CC | disorder. (I) is useful for diagnostics, therapeutics, prophylaxis and as | | |
| CC | research reagent and kits. (I) is useful prophylactically to prevent or | | |
| CC | delay infection, inflammation or tumour formation. The present sequence | | |
| CC | represent a mouse caspase 7 inhibiting chimeric phosphorochioate | | |
| CC | oligonucleotide having 2'-MOE wings and a deoxy gap, which is used in an | | |
| CC | example from the present invention | | |
| SQ | | | |
| Sequence | 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other; | | |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; | | |
| Best Local Similarity | 80.0%; Pred.No. 1.1e+03; | | |
| Matches | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0; | | |
| OY | 1204 CTCCTTCGCGGCTCCACGGT 1223 | | |
| DB | CTCCTTCGCTTACTCACCGGT 1 | | |
| RESULT 1878 | | | |
| AAD39347 | | | |
| ID | AAD39347 standard; DNA; 20 BP. | | |
| XX | | | |

AC AAD39347;
 XX
 DT 04-OCT-2002 (first entry)
 XX
 DE Human Von Willebrand factor-cleaving protease cloning PCR primer, 6395.
 XX
 KM Human; Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;
 KM transgenic animal; immunisation; thrombolytic disease; preclampsia;
 KM thrombotic thrombocytopenic purpura; TTP; Henoch-Schönlein purpura;
 KM thrombosis; neonatal thrombocytopenia; haemolytic-uraemic syndrome;
 KM transgenic; anticoagulant; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200242441-A2.
 XX
 PD 30-MAY-2002.
 XX
 PE 20-NOV-2001; 2001WO-EP013391.
 XX
 PR 22-NOV-2000; 2000US-00721254.
 XX
 PR 12-APR-2001; 2001US-00833328.
 XX
 PA (BAXT) BAXTER AG.
 XX
 PI Laemmle B, Gerritsen HE, Furlan M, Turecek P, Schwarz H;
 PI Scheiflinger F, Antoine G, Kerschbaumer R, Tagliavacca L;
 PI Zimmermann K, Voelkel D;
 XX
 DR WPI; 2002-479950/51.
 XX
 PT Novel isolated or substantially purified Von Willebrand factor-cleaving
 PT protease, useful for producing preparation for therapy of thrombosis and
 PT thrombolytic disease such as thrombotic thrombocytopenic purpura.
 XX
 PS Example 3; Page 34; 93pp; English.
 XX
 CC The invention relates to an isolated or substantially pure Von Willebrand
 CC factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for
 CC purifying vWF which involves providing vWF-cp as a ligand, contacting a
 CC solution comprising vWF with the polypeptide ligand under conditions
 CC where vWF is bound to the ligand and recovering from the ligand purified
 CC vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies
 CC which involves immunising an animal with vWF-cp and isolating the anti-
 CC vWF cp polypeptide antibodies from the animal. vWF-cp is useful for
 CC producing a preparation of prophylaxis and therapy of thrombosis and
 CC thrombolytic disease such as thrombotic thrombocytopenic purpura (TTP),
 CC Henoch-Schönlein purpura, preclampsia, neonatal thrombocytopenia or
 CC haemolytic-uraemic syndrome. vWF-cp can also be used for processing
 CC plasmatic or recombinantly produced vWF. The invention is useful for
 CC construction expression systems and generating transgenic animals which
 CC express the polypeptide in vivo. The present sequence is human vWF-cp
 CC gene cloning RT-PCR primer
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
 XX
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 DB 253 CCTGAGAGAGCCCCACACG 272
 1 CCTGAGAGGGGTCCCAAGATG 20
 XX
 RESULT 1879
 ABO74705
 ID ABO74705 standard; DNA; 20 BP.
 XX
 AC ABO74705;
 XX
 DT 24-OCT-2002 (first entry)
 XX

DE MAC2-BP gene sense PCR primer SEQ ID NO:48.
 XX
 KM Human; PCR primer; identification; tumour senescence; cytotoxic; ss;
 KM abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200261134-A2.
 XX
 PD 08-AUG-2002.
 XX
 PE 21-DEC-2001; 2001WO-US050574.
 XX
 PR 21-DEC-2000; 2000US-0257907P.
 XX
 PR 17-DEC-2001; 2001US-00257907.
 XX
 PA (UNII) UNIV ILLINOIS FOUND.
 XX
 PI Roninson IB, Chang B;
 XX
 DR WPI; 2002-619266/66.
 XX
 PT Identifying a compound that induces senescence in a mammalian p53
 PT deficient or tumor cell comprises assaying expression of cellular genes
 PT in the presence of the compound with expression of the genes in the
 PT absence of the compound.
 XX
 PS Example 4; Page 52; 73pp; English.
 XX
 CC The present invention describes a method for identifying a compound that
 CC induces senescence in a mammalian cell comprising culturing the cell in
 CC the presence and absence of the compound, assaying expression of at least
 CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with
 CC corresponding accession numbers given in the specification, and
 CC identifying compounds that induce senescence when expression of (G1a) or
 CC expression of (G2) is lower, in the presence of the compound. Also
 CC described: (1) a compound that induces senescence in a mammalian cell;
 CC (2) assessing efficacy of a treatment of a disease or condition relating
 CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a
 CC disease or condition relating to abnormal cell proliferation or
 CC neoplastic cell growth; or (4) identifying a compound that inhibits
 CC senescence-associated induction of cellular gene expression. The compound
 CC is useful for treating or for assessing efficacy of treatment of a
 CC disease or condition relating to abnormal cell proliferation or
 CC neoplastic cell growth. The compound of the invention has a growth-
 CC inhibitory effect without producing systemic side effects found with
 CC other growth-inhibitory compounds. ABO74611 to ABO74734 represent PCR
 CC primers which are used in an example from the present invention
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 XX
 QY Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 DB 48 ACCAGCAGTGTGCTGTA 67
 1 ACCATGAGTGTGATGCTGA 20
 XX
 RESULT 1880
 ABR71229/c
 ID ABR71229 standard; DNA; 20 BP.
 XX
 AC ABR71229;
 XX
 DT 15-JUL-2002 (first entry)
 XX
 DE Mouse HYPPLIP1 locus PCR primer #302.
 XX
 KM Human; mouse; HYPPLIP1; FCHL1; familial combined hyperlipidaemia; cancer;
 KM lipid disorder; PCR; primer; ss.


```

XX OS Mus sp.
XX PN WO200220848-A2.
XX PD 14-MAR-2002.
XX PF 07-SEP-2001; 2001WO-US028182.
XX PR 08-SEP-2000; 2000US-0231322P.
XX PA (REGC ) UNIV CALIFORNIA.
XX PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Lusis AJ;
XX PI Ohmen J, Ross D, Tafuri S, Wu C;
XX DR WPI; 2002-329882/36.
XX PT New mouse HYPLIPI and human FCHL1 (familial combined hyperlipidemia)
XX PT genes and their sequence variations, useful for diagnosing, treating or
XX PT preventing lipid disorders and cancers.
XX PS Claim 11; Page 76; 102pp; English.
XX CC The invention relates to an isolated polynucleotide comprising a sequence
XX CC variation of a mouse HYPLIPI cDNA or a human FCHL1 (familial combined
XX CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
XX CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
XX CC or preventing cancer associated with expression of FCHL1, as well as for
XX CC treating lipid disorder. The mouse HYPLIPI cDNA or human FCHL1 gene are
XX CC also useful for diagnosing or prognosing a predisposition to lipid
XX CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIPI, human
XX CC FCHL1 coding sequences and PCR primers of the invention
XX SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 16 GGATGGACAGGAGTGCAGAC 35
Db 20 GGATGGAGAGGCATCCTGAG 1

RESULT 1881
AAL46755/c
ID AAL46755 standard; DNA; 20 BP.
XX AC AAL46755;
XX DT 08-AUG-2002 (first entry)
XX DE ICAM antisense oligonucleotide #1.
XX KW Modified antisense oligonucleotide; antisense; HIV; cancer; infection;
XX KW cytostatic; virucide; anti-HIV; hepatotropic; antiinflammatory;
XX KW phosphorothioate backbone; integrin; cell-cell adhesion receptor; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX modified_base 1..3 /tag= a
XX /mod_base= OTHER
XX /note= "optionally phosphorothioate backbone"
XX modified_base 6..8 /tag= b
XX /mod_base= OTHER
XX /note= "optionally phosphorothioate backbone"
XX modified_base 11..13 /tag= c
XX /mod_base= OTHER

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FT modified_base 16..19 /note= "optionally phosphorothioate backbone"
FT /tag= d
FT /mod_base= OTHER
FT /note= "optionally phosphorothioate backbone"
XX EP1182206-A2.
XX 27-FEB-2002.
XX 07-NOV-1994; 2001EP-00124078.
XX 12-NOV-1993; 93DE-04338704.
XX 07-NOV-1994; 94EP-00117513.
XX (FARH ) HOECHST AG.
XX Peymann A, Uhlmann E, Mag M, Kretschmar G, Helsing M, Winkler I;
XX WPI; 2002-353922/39.
XX New nuclease-resistant oligonucleotides having modified non-terminal
XX pyrimidine nucleoside(s), useful e.g. for treating cancer or viral
XX diseases or as diagnostic reagents.
XX Disclosure; Page 12; 19pp; German.
XX The present invention relates to oligonucleotides having at least one non
XX -terminal pyrimidine nucleoside modified and additionally having the 5'-
XX and/or 3'-terminal modified. These can be used in the treatment of viral
XX infections, such as HIV, HSV-1, HSV-2, influenza virus, VSV, hepatitis B
XX and papilloma viruses, cancer and diseases involving integrins and cell-
XX cell adhesion receptors. The present sequence is an antisense
XX oligonucleotide of the invention
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGGGG 245
Db 20 GAGAGGGGAGTGTGGGG 1

RESULT 1882
AAD44724/c
ID AAD44724 standard; DNA; 20 BP.
XX AC AAD44724;
XX DT 13-DEC-2002 (first entry)
XX DE Human c-raf kinase antisense oligonucleotide ISIS #5149.
XX KW Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
XX KW therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
XX KW antisense; phosphorothioate backbone; c-raf kinase; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1..20 /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX US6410518-B1.
XX 25-JUN-2002.

```

PF 18-FEB-2000; 2000US-00506073.
 XX
 PR 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95WO-US007111.
 PR 26-NOV-1996; 96US-00756806.
 PR 07-JUL-1997; 97US-00888982.
 PR 06-JUL-1998; 98WO-US013961.
 PR 28-AUG-1998; 98US-00143214.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP;
 XX
 DR WPI; 2002-597918/64.
 XX
 PT Treating cancer, angiogenesis or neovascularization by administering
 PT antisense oligonucleotides targeted to human raf sequences.
 XX
 PS Disclosure; Col 12; 41pp; English.
 XX
 CC The present invention relates to novel antisense oligonucleotides which
 CC are targeted to nucleic acids encoding human raf proteins and capable of
 CC inhibiting raf expression. The invention also relates to methods of
 CC inhibiting hyperproliferation of cells which involves contacting the
 CC hyperproliferating cells with a therapeutically effective amount of an
 CC oligonucleotide of the invention. The method is useful for treating
 CC cancer, angiogenesis or neovascularisation, especially ocular
 CC angiogenesis or neovascularisation. The present DNA sequence is an
 CC antisense oligonucleotide targeted to human c-raf kinase
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1186 ATGGCCACAGCGCTCCCT 1205
 DB 20 ATGGCTCCAGCGCTTCACCT 1
 RESULT 1883
 ABQ78911
 ID ABQ78911 standard; DNA; 20 BP.
 XX
 AC ABQ78911;
 XX
 DT 23-OCT-2002 (first entry)
 XX
 DE S. roseosporus daptomycin biosynthetic gene cluster PCR primer P92.
 XX
 CC Daptomycin biosynthetic gene cluster; thioesterase; antibacterial;
 CC fungicide; virucide; antiparasitic; immunomodulator; antilipemic;
 CC cytostatic; gene therapy; antimitotic; immunomodulatory; siderophore;
 CC anti-cholesterolemic; agrochemical; linker; PCR; primer; ss.
 XX
 OS Streptomyces roseosporus.
 XX
 PN WO200259322-A2.
 XX
 PD 01-AUG-2002.
 XX
 PF 17-OCT-2001; 2001WO-US032354.
 XX
 PR 17-OCT-2000; 2000US-0240879P.
 PR 28-FEB-2001; 2001US-0272207P.
 PR 06-AUG-2001; 2001US-0310385P.
 XX
 PA (MIAO/) MIAO V P W.
 PA (BRIA/) BRIAN P.
 PA (BALT/) BALTZ R H.
 PA (SILV/) SILVA C J.
 XX

PI Miao VPW, Brian P, Baltz RH, Silva CJ;
 XX
 DR WPI; 2002-599794/64.
 XX
 PT Isolated nucleic acid molecule from a bacterial daptomycin biosynthetic
 PT gene cluster encoding a thioesterase or thioesterase domain, useful for
 PT generating novel linear and cyclic peptides, and products in a cell.
 XX
 PS Example 2; Page 91; 227pp; English.
 XX
 CC The invention relates to a novel isolated nucleic acid molecule
 CC comprising a sequence that encodes a thioesterase or thioesterase domain,
 CC derived from a bacterial daptomycin biosynthetic gene cluster. The
 CC proteins of the invention have antibacterial, fungicide, virucide,
 CC antiparasitic, immunomodulator, antilipemic, and cytostatic activity. The
 CC polynucleotides may have a use in gene therapy. The compositions and
 CC methods of the present invention are useful for generating novel linear
 CC and cyclic peptides and improving yield of a product in a cell expressing
 CC an daptomycin non-ribosomal peptide synthetase (NRPS) to be used as new
 CC compounds or in producing new compounds, such as antibiotics,
 CC antifungals, antivirals, antiparasitics, antimitotics, antitumour agents,
 CC immunomodulatory agents, anti-cholesterolemic agents, siderophores,
 CC agrochemicals and cytostatics. The sequence represents a PCR primer used
 CC in the invention to amplify the S. roseosporus daptomycin biosynthetic
 CC gene cluster from a BAC library
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 374 AGGCTTCAGCCAGCTCTCG 393
 DB 1 AGCTCTCAGCCATCTCTCG 20
 RESULT 1884
 ABX97255
 ID ABX97255 standard; DNA; 20 BP.
 XX
 AC ABX97255;
 XX
 DT 20-MAY-2003 (first entry)
 XX
 DE Human NOV-associated forward primer from primer-probe set Ag3338.
 XX
 CC NOVX; cytostatic; cardiant; antiarteriosclerotic; antiasthmatic; cancer;
 CC hypotensive; cardiomyopathy; bronchial asthma; gene therapy; vaccine;
 CC human; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200272757-A2.
 XX
 PD 19-SEP-2002.
 XX
 PF 08-MAR-2002; 2002WO-US006908.
 XX
 PR 08-MAR-2001; 2001US-0274101P.
 PR 08-MAR-2001; 2001US-0274194P.
 PR 08-MAR-2001; 2001US-0274281P.
 PR 08-MAR-2001; 2001US-0274322P.
 PR 09-MAR-2001; 2001US-0274849P.
 PR 12-MAR-2001; 2001US-0275235P.
 PR 13-MAR-2001; 2001US-0275578P.
 PR 13-MAR-2001; 2001US-0275579P.
 PR 13-MAR-2001; 2001US-0275601P.
 PR 14-MAR-2001; 2001US-0276000P.
 PR 16-MAR-2001; 2001US-0276776P.
 PR 19-MAR-2001; 2001US-0276994P.
 PR 20-MAR-2001; 2001US-0277239P.
 PR 20-MAR-2001; 2001US-0277321P.

PR 20-MAR-2001; 2001US-0277327P.
PR 21-MAR-2001; 2001US-0277791P.
PR 22-MAR-2001; 2001US-0277833P.
PR 23-MAR-2001; 2001US-0278152P.
PR 26-MAR-2001; 2001US-0278894P.
PR 27-MAR-2001; 2001US-0278999P.
PR 27-MAR-2001; 2001US-0279036P.
PR 28-MAR-2001; 2001US-0279344P.
PR 30-MAR-2001; 2001US-0277338P.
PR 30-MAR-2001; 2001US-0279959P.
PR 30-MAR-2001; 2001US-0280233P.
PR 02-APR-2001; 2001US-0280802P.
PR 02-APR-2001; 2001US-0280822P.
PR 02-APR-2001; 2001US-0280900P.
PR 04-APR-2001; 2001US-0281194P.
PR 13-APR-2001; 2001US-0283675P.
PR 30-APR-2001; 2001US-0287424P.
PR 03-MAY-2001; 2001US-0288066P.
PR 03-MAY-2001; 2001US-0288342P.
PR 03-MAY-2001; 2001US-0288528P.
PR 15-MAY-2001; 2001US-0291190P.
PR 16-MAY-2001; 2001US-0291099P.
PR 16-MAY-2001; 2001US-0291240P.
PR 30-MAY-2001; 2001US-0294485P.
PR 31-MAY-2001; 2001US-0294889P.
PR 31-MAY-2001; 2001US-0294899P.
PR 18-JUN-2001; 2001US-0293027P.
PR 19-JUN-2001; 2001US-0299303P.
PR 19-JUN-2001; 2001US-0299310P.
PR 10-JUL-2001; 2001US-0304354P.
PR 31-JUL-2001; 2001US-0309198P.
PR 16-AUG-2001; 2001US-0312903P.
PR 10-SEP-2001; 2001US-0318462P.
PR 12-SEP-2001; 2001US-0318770P.
PR 27-SEP-2001; 2001US-0325430P.
PR 27-SEP-2001; 2001US-0325681P.
PR 18-OCT-2001; 2001US-0330380P.
PR 31-OCT-2001; 2001US-0335301P.
PR 14-NOV-2001; 2001US-0332172P.
PR 14-NOV-2001; 2001US-0332271P.
PR 14-NOV-2001; 2001US-0332272P.
PR 14-NOV-2001; 2001US-0333184P.
PR 21-NOV-2001; 2001US-0333272P.
PR 03-DEC-2001; 2001US-0332094P.
PR 03-DEC-2001; 2001US-0337426P.
PR 04-DEC-2001; 2001US-0338092P.
PR 03-JAN-2002; 2001US-0337185P.
PR 07-MAR-2002; 2002US-0345705P.
PR 07-MAR-2002; 2002US-00092900.
XX
PA (CURA-) CURAGEN CORP.
XX
XX Padigar M, Spytek KA, Shenoy SG, Taupier RJ, Pena CEA, Li L;
XX Zerhusen BD, Gusev V, Ji W, Gorman L, Miller CE, Kekuda R;
PI Pattarajan M, Gangoli E, Vernet CAM, Guo X, Tchernev V;
PI Fernandes ER, Casman SJ, Malyankar UM, Gerlach V, Liu Y, Anderson D;
PI Spaderna SK, Catterton E, Burgess C, Leite M, Zhong H, Alsobrook JP;
PI Lepley DM, Rieger DK;
XX
XX WPI; 2002-723332/78.
XX
XX NOVX polypeptides and polynucleotides, useful for preventing or treating
PT a disorder associated with aberrant NOVX expression or activity e.g.,
PT cancer, hypertension, atherosclerosis, cardiomyopathy or bronchial
PT asthma.
XX
XX Example C; Page 565; 1103pp; English.
XX
XX This invention describes novel human NOVX polypeptides which have
CC cytostatic, cardiant, antiarteriosclerotic, antiasthmatic and hypotensive
CC activity. Pharmaceutical compositions comprising the NOVX proteins or
CC nucleic acid molecules or NOVX antibodies are useful for preventing or
CC treating a disorder associated with aberrant NOVX expression or activity

CC e.g. cancer, hypertension, atherosclerosis, cardiomyopathy or bronchial
CC asthma. The products of the invention can be used for gene therapy or in
CC a vaccine. ABX13460-ABX13462 and ABX97186-ABX97593 represent PCR primers
CC and probes used in the amplification and isolation of the NOVX
CC polynucleotides represented in ABX97008-ABX97185 which encode the
CC polypeptides represented in ABU65041-ABU65218
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 306 CCCACTCAGCTCTGCACCAG 325
Db 1 CCCATTGCACTGAACAG 20

RESULT 1885

AAS18551/c

ID AAS18551 standard; DNA; 20 BP.

XX AAS18551;

XX 12-MAR-2002 (first entry)

XX Mouse AGP-3 PCR primer #5.

XX Mouse; AGP-3; antiinflammatory; antiarthritic; immunosuppressive;
KW dermatological; neuroprotective; nootropic; immunomodulator; metabolic;
KW antidiabetic; analgesic; nephrotropic; osteopathic; cytostatic; fever;
KW antiparkinsonian; antipsoriatic; vasotropic; antibacterial; asthma;
KW AGP-3 receptor; tumour necrosis factor ligand family; AGP-3 receptor;
KW mesenteric lymph node; AGP-3R; inflammatory disease; immune disorder;
KW rheumatoid arthritis; graft-versus-host disease; Crohn's disease;
KW pancreatitis; amyotrophic lateral sclerosis; ALS; Alzheimer's disease;
KW diabetes; glomerulonephritis; inflammatory bowel disease; ischaemia; ss;
KW multiple sclerosis; Parkinson's disease; transgenic animal; PCR primer.

OS Mus musculus.

XX WO200185782-A2.

XX 15-NOV-2001.

XX 12-FEB-2001; 2001WO-US004568.

XX 11-FEB-2000; 2000US-0181800P.

XX (AMGE-) AMGEN INC.

XX Boyle WJ, Hsu H;

XX WPI; 2002-049441/06.

XX Composition useful for identifying modulator of receptor for treating
PT asthma and glomerulonephritis, comprises AGP-3 (tumour necrosis factor
PT ligand family member) receptor and encoding nucleic acids.

XX Disclosure; Page 39; 124pp; English.

XX The invention relates to a composition (I) comprising AGP-3 receptor
CC (tumour necrosis factor ligand family member) related protein (II)
CC attached to a vehicle protein. (I) is useful for modulating AGP-3-related
CC activity in mesenteric lymph nodes (MLN) of a mammal. (II) is useful in
CC assays to identify cells and tissues that express AGP-3R or proteins
CC related to AGP-3R-related protein and for identifying compounds (agonists
CC or antagonists) that interact with AGP-3R proteins. (II) is also useful
CC for identifying intracellular proteins that interact with the respective
CC cytoplasmic domains by yeast two-hybrid screening process. (II) is
CC involved in B cell growth, survival and activation particularly in lymph
CC node, spleen, and Peyer's patches. AGP-3R agonists and antagonists
CC identified using (II) are used for modulating B cell response and are

CC used to treat diseases characterised by inflammatory processes or
 CC deregulated immune response such as rheumatoid arthritis, graft-versus-
 CC host disease, Crohn's disease, lupus, etc. (II) is also useful in the
 CC production of hybridoma cells which are derived from B cells, which
 CC involves treating the hybridoma cells with (II). (II) is useful in the
 CC treatment of inflammatory conditions of joints, e.g., rheumatoid
 CC arthritis, osteoarthritis, etc. (II), its agonists or antagonists are
 CC useful for treating acute pancreatitis, amyotrophic lateral sclerosis
 CC (ALS), Alzheimer's disease, asthma, atherosclerosis, cachexia/anorexia,
 CC diabetes, fever, glomerulonephritis, inflammatory bowel disease,
 CC ischaemic injury including cerebral ischaemia, multiple myeloma, multiple
 CC sclerosis, osteoporosis, Parkinson's disease, pain, reperfusion injury,
 CC septic shock, etc. The nucleic acids are also useful for developing the
 CC transgenic animals expressing (II), which are useful for producing the
 CC polypeptides and for the study of in vivo biological activity. The
 CC present sequence represents mouse AGP-3 PCR primer #5
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 916 CTGTTCTCTTCAGCTGCT 935
 DB 20 CTGTTCTGTGGCGCGCT 1
 RESULT 1886
 ABL94308/C
 ID ABL94308 standard; DNA; 20 BP.
 XX
 AC ABL94308;
 XX
 DT 29-JUL-2002 (first entry)
 XX
 DE Human C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:74.
 XX
 KW Human; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2; LAP;
 KW TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP; transcription factor;
 KW tissue development; cellular function; proliferation; differentiation;
 KW hormone responsiveness; oxidative stress response;
 KW IL-6 signalling mediator; interleukin-6; carbohydrate metabolism;
 KW immunity; Th1 response; female fertility; gluconeogenesis; ovarian;
 KW cancer; tumour formation; type II; diabetes; infection; inflammation;
 KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate linkages"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
 FT cytosines are 5-methylcytosine"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
 FT cytosines are 5-methylcytosine"
 XX
 XX US6271030-B1.
 XX
 XX 07-AUG-2001.
 PD
 XX 14-JUN-2000; 2000US-00593711.
 XX
 XX 14-JUN-2000; 2000US-00593711.
 PR
 XX

(ISIS-) ISIS PHARM INC.
 Monia BP, Butler MM, Wyatt J;
 WPI; 2002-214451/27.
 DR Novel antisense compound targeted to nucleic acids encoding human or
 PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
 XX inhibiting expression of human or mouse C/EBP beta in cells/tissues.
 XX
 PS Example 15; Col 43-44; 69pp; English.
 XX
 CC Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
 CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
 CC gene, which inhibit its expression. The antisense oligonucleotides were
 CC designed to target different regions of the human and/or mouse C/EBP
 CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
 CC by quantitative real-time PCR. The C/EBP family of proteins are a family
 CC of transcription factors which regulate the expression of a wide range of
 CC genes that control normal tissue development, cellular function, cellular
 CC proliferation and functional differentiation. C/EBP beta (also known as
 CC C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP)
 CC primarily regulates hormone responsiveness and oxidative stress responses
 CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
 CC thought to be involved in carbohydrate metabolism, immunity, the Th1
 CC response, female fertility and gluconeogenic pathways. C/EBP beta is
 CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the
 CC highest expression found in the lung. It is also expressed at a higher
 CC level in malignant ovarian tissue compared with normal ovarian tissue,
 CC and its expression in pancreas is upregulated in response to chronically
 CC elevated levels of glucose, indicating that it is involved in the
 CC impairment of insulin secretion in type II diabetes. The oligonucleotides
 CC of the invention are useful for diagnosis, prevention and treatment of
 CC conditions associated with C/EBP beta expression, such as cancer
 CC (particularly ovarian cancer), tumour formation, diabetes (particularly
 CC type II diabetes), infection, or inflammation
 XX
 SQ Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 65 TGAATACCCAGGGGAGGCC 84
 DB 20 TGAGACTCCGGGAGGCC 1
 RESULT 1887
 ABK49114
 ID ABK49114 standard; DNA; 20 BP.
 XX
 AC ABK49114;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human KDR/FLK-1 mutagenic PCR primer for Y801F mutant.
 XX
 KW Human; KDR; kinase insert domain-containing receptor; FLK-1; ss;
 KW fetal liver kinase-1; cytosolic; antidiabetic; antirheumatic;
 KW antiarthritic; signal transduction; phosphorylation; cell proliferation;
 KW angiogenesis; tumour; diabetic omentopathy; chronic rheumatoid arthritis;
 KW PCR; primer; mutant.
 XX
 XX Homo sapiens.
 OS
 OS Synthetic.
 XX
 XX WO200229090-A1.
 XX
 XX 11-APR-2002.
 PD
 XX 02-OCT-2001; 2001WO-JP008684.
 PF
 XX

```

PR 03-OCT-2000; 2000JP-00303694.
XX (KYOW ) KYOWA HAKKO KOGYO KK.
PA (SHIB/) SHIBUYA M.
XX
XX Shibuya M, Takahashi T, Furuya A, Shitara K;
PI WPI; 2002-352237/38.
XX
XX Screening substances inhibiting the binding of signal-transducing
PT molecule to KDR/Flk-1 phosphorylated at tyrosine at 1175-position, as
PT cell proliferation inhibitors and angiogenesis inhibitors for treatment
PT of e.g. tumor.
XX
XX Example 8; Page 65; 81pp; Japanese.
XX
XX The invention relates to inhibiting the signal transduction of KDR/Flk-1
CC (kinase insert domain-containing receptor/fetal liver kinase-1) is by
CC using a substance inhibiting the binding of a signal-transducing molecule
CC to KDR/Flk-1 phosphorylated at tyrosine at the 1175-position. Also
CC included are methods of detecting/inhibiting/screening for cell
CC proliferation, angiogenesis, KDR/Flk-1 signal transduction and KDR/Flk-1
CC phosphorylation at tyrosine at the 1175-position using the binding
CC inhibitors, compounds obtained by the screening methods, drugs containing
CC the inhibitors, a monoclonal antibody or its fragment recognising KDR/Flk
CC -1 phosphorylated at tyrosine at the 1175-position, a DNA encoding the
CC monoclonal antibody or its fragment, a recombinant vector containing the
CC DNA and a transformant obtained by transferring the recombinant vector
CC into a host cell. The method is useful for screening substances
CC inhibiting the binding of a signal-transducing molecule to KDR/Flk-1
CC phosphorylated at tyrosine at 1175-position, as cell proliferation
CC inhibitors and angiogenesis inhibitors for treatment of e.g. tumor,
CC diabetic omentopathy and chronic rheumatoid arthritis. A method for
CC detecting angiogenesis is also provided. The present sequence is a PCR
CC primer used to create a KDR/FLK-1 mutant where the Tyr at 801 is changed
CC to Phe
XX
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1281 GCCAGGCATCTCTGCCAACG 1300
Db 1 GACAGGCTTCTTGCCATCG 20
|||||
|||||

RESULT 1888
ABI97222/c
ID ABI97222 standard; DNA; 20 BP.
XX
XX ABI97222;
AC
XX
XX 16-FEB-2002 (first entry)
DT
XX
XX Capture oligonucleotide Zip ID#4309 oligo #9.
DE
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX Synthetic.
OS
XX
XX WO200179548-A2.
PN
XX
XX 25-OCT-2001.
PD
XX
XX 04-APR-2001; 2001WO-US010958.
PF
XX
XX 14-APR-2000; 2000US-0197271P.
PR

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XX (CORR ) CORNELL RES FOUND INC.
PA
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
PI WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
PT
XX Example 5; Fig 29; 300pp; English.
PS
XX
XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, Tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI92074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 920 TCCGTGTTCCAGCTGCTCCGT 939
Db 20 TCCGTGTTCCAGCTGCTCCGT 1
|||||
|||||

RESULT 1889
AAS20906/c
ID AAS20906 standard; DNA; 20 BP.
XX
XX AAS20906;
AC
XX
XX 09-APR-2002 (first entry)
DT
XX
XX Human peptide transporter hPHT1 cDNA RT-PCR primer #3.
DE
XX
XX Human; peptide histidine transporter 1; hPHT1; peptide transport;
KW peptide-based drug transport; cell membrane; gastrointestinal tract;
KW hPHT1-related disease; reverse transcriptase; RT-PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200192468-A2.
PN
XX
XX 06-DEC-2001.
PD
XX
XX 31-MAY-2001; 2001WO-US017650.
PF
XX
XX 31-MAY-2000; 2000US-0208061P.
PR
XX (RUTF ) UNIV RUTGERS STATE NEW JERSEY.
PA

```

XX PI Knipp GT, Herrera-Ruiz D;
 XX DR WPI; 2002-130529/17.
 XX PT Novel isolated human peptide histidine transporter which facilitates
 XX PT peptide transport across cell membranes in gastrointestinal tract, useful
 XX PT as target for evaluating peptide and peptide-based drug transport.
 XX PS Example 2; Page 55; 95bp; English.
 XX CC The present invention relates to nucleic acid sequences encoding human
 XX CC peptide histidine transporter 1 (hPHT1) protein, the hPHT1 proteins and
 XX CC methods for using them. The nucleic acid sequences of the invention are
 XX CC is useful for screening a test compound for human PHT1 modulating
 XX CC activity. The hPHT1 proteins are useful as a target for evaluating
 XX CC peptide and peptide-based drug transport. The functional characterisation
 XX CC of hPHT1 and the ability to correlate the Michaelis-Menten kinetics for a
 XX CC particular substrate to the molar expression level of hPHT1 provides
 XX CC crucial information regarding the ability of this transporter to
 XX CC facilitate the uptake and transport of peptides and peptide-based drugs.
 XX CC The PHT1 proteins facilitate peptide transport across cell membranes in
 XX CC the gastrointestinal tract and other organs in which they are expressed.
 XX CC The identification of full length hPHT1 clone facilitates the development
 XX CC of optimal peptide-based drugs for treating patients with hPHT1-related
 XX CC diseases. AAS20878-AAS20911 represent reverse transcriptase (RT)-PCR
 XX CC primers used in the methods of the present invention
 XX CC
 XX SQ Sequence 20 BP; 0 A; 5 C; 12 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 551 AGCCCTCAGCGCGCCCTC 570
 Db 20 AACGCCAGCGCGCGCGC 1
 RESULT 1890
 ABK67749
 ID ABK67749 standard; DNA; 20 BP.
 XX AC ABK67749;
 XX DT 02-JUL-2002 (first entry)
 XX DE Mouse transglutaminase associated PCR primer #9.
 XX KW Transglutaminase; TGM; transamidation; autoimmune disease;
 XX KW Addison's disease; AI haemolytic anaemia; AI thrombocytopenic purpura;
 XX KW AI thyroid disease; atrophic gastritis; pernicious anaemia;
 XX KW Chron's disease; colitis ulcerosa; Goodpasture syndrome; IgA nephropathy;
 XX KW Ig glomerulonephritis; myasthenia gravis; partial lipodystrophy;
 XX KW polycystitis; primary biliary cirrhosis; primary sclerosing cholangitis;
 XX KW progressive systemic sclerosis; recurrent pericarditis;
 XX KW Sjogren's syndrome; relapsing polychondritis; arthritis; rheumatism;
 XX KW sarcoidosis; SLE; splenic atrophy; diabetes; Wegener granulomatosis;
 XX KW ulcerative colitis; vasculitis; vitiligo; PCR; primer; ss.
 XX OS Mus sp.
 XX PN WO200222830-A2.
 XX PD 21-MAR-2002.
 XX PF 14-SEP-2001; 2001WO-GB004120.
 XX PR 15-SEP-2000; 2000GB-0002768.
 XX PR 16-MAY-2001; 2001GB-00011995.
 XX PA (UVCA-) UNIV COLLEGE CARDIFF.
 XX PT

PI Aeschlimann DF, Grenard PM;
 XX WPI; 2002-329954/36.
 XX PT Nucleic acids which encode novel transglutaminase enzymes TG-Z and TG-Y
 XX PT which can be used in diagnostic methods of autoimmune diseases.
 XX PS Disclosure; Page 27; 67pp; English.
 XX CC The invention relates to nucleic acids which encode novel polypeptides
 XX CC having transglutaminase activity. The compositions of polypeptide are
 XX CC useful for transamidation reactions on peptides and polypeptides.
 XX CC Detection of the polypeptides with transglutaminase activity are useful
 XX CC in a diagnostic method in a subject or in cells derived from a subject
 XX CC having an autoimmune disease. The method for detecting transglutaminase
 XX CC proteins may be used to diagnose autoimmune diseases which include
 XX CC Addison's disease, AI haemolytic anaemia, AI thrombocytopenic purpura, AI
 XX CC thyroid diseases, atrophic gastritis, pernicious anaemia, Chron's
 XX CC disease, colitis ulcerosa, Goodpasture syndrome, IgA nephropathy or IgG
 XX CC glomerulonephritis, myasthenia gravis, partial lipodystrophy,
 XX CC polycystitis, primary biliary cirrhosis, recurrent pericarditis, relapsing
 XX CC progressive systemic sclerosis, recurrent arthritis, rheumatism, sarcoidosis, Sjogren's
 XX CC syndrome, SLE, splenic atrophy, type I (insulin-dependent) diabetes
 XX CC mellitus, Wegener granulomatosis, ulcerative colitis, vasculitis (both
 XX CC systemic and cutaneous) and vitiligo. This sequence represents a primer
 XX CC used in the study of transglutaminase genes in which DNA, amino acid
 XX CC sequences and chromosomal locations of novel transglutaminases are
 XX CC determined
 XX CC
 XX SQ Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 599 TTGGGAACTGGAGACCTAC 618
 Db 1 TTGGGGAGCTGGAGAGCAAC 20
 RESULT 1891
 ABQ81403
 ID ABQ81403 standard; DNA; 20 BP.
 XX AC ABQ81403;
 XX DT 12-DEC-2002 (first entry)
 XX DE Arabidopsis AINTEGUMENTA-like gene PCR primer.
 XX KW Lipid metabolism regulator; LTR; plant; transgenic plant;
 XX KW transcription factor; seed oil; oilseed; cardiant; wril; AINTEGUMENTA;
 XX KW PCR; primer; ss.
 XX OS Arabidopsis thaliana.
 XX PN WO200272775-A2.
 XX PD 19-SEP-2002.
 XX PF 08-MAR-2002; 2002WO-US007441.
 XX PR 08-MAR-2001; 2001US-0274170P.
 XX PA (BADI) BASF PLANT SCI GMBH.
 XX PI Benning C, Cernac A;
 XX DR WPI; 2002-713509/77.
 XX PT New isolated lipid metabolism regulator nucleic acid, useful for
 XX PT producing transgenic plants having modified level of seed storage

PT compound, e.g. lipids for generating seed oils which have the ability of
PT reducing risk of heart disease.

XX Example 2; Page 34; 72pp; English.

XX The present sequence is that of a primer for an AINTEGUMENTA-like protein
CC gene of Arabidopsis thaliana. Overlapping PCR primers (see ABQ81398-407)
CC were used in amplification and sequencing reactions to identify sequence
CC changes in 2 wild mutants compared to wild-type sequences in order to
CC identify the true wild gene. In subsequent experiments, wild mutants were
CC complemented with cosmids containing wild-type genomic DNA, and PCR was
CC used to produce a full-length wild cDNA (see ABQ81395) encoding a lipid
CC metabolism regulator (LMR) protein (see ABB79954). LMR is suggested to
CC act as a transcription factor regulating lipid and seed storage compound
CC metabolism during seed development. The invention relates to the use of
CC LMR nucleic acids in the production of transgenic plants having a
CC modified level of a seed storage compound. The level of a lipid, fatty
CC acid, starch or seed storage protein can be modified, yielding a seed oil
CC that is medically and nutritionally useful in reducing the risk of heart
CC disease

XX Sequence 20 BP; 1 A; 7 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1688 TCTTCCCTGCTACTCTCTG 1707

Db 1 TCTTCCCTGCTACTCTCTG 20

RESULT 1892

ABT08433

ID ABT08433 standard; DNA; 20 BP.

XX AC ABT08433;

XX 27-NOV-2002 (first entry)

DE Human Mac2-BP promoter PCR primer SEQ ID NO: 68.

XX Human; cyclin-dependent kinase; CDK; cyclin-dependent kinase inhibitor;
KW inhibitor; cancer; age-related disease; promoter; atherosclerosis;
KW cytosolic; antiarteriosclerotic; neurotropic; neuroprotective;
KW nephrotropic; antiarthritic; arthritis; renal disease;
KW Alzheimer's disease; amyloidosis; PCR; primer; ss.

XX Homo sapiens.

XX WO200266681-A2.

XX 29-AUG-2002.

XX 01-FEB-2002; 2002WO-US002784.

XX 01-FEB-2001; 2001US-0265840P.

PR 21-MAY-2001; 2001US-00861925.

XX (UNII) UNIV ILLINOIS FOUND.

XX Poole J, Robinson IB, Chang B;

XX WPI; 2002-674960/72.

XX New recombinant expression construct, useful for identifying compounds
PT that inhibit the induction of genes induced by cyclin-dependent kinase
PT inhibitors for preventing or treating cancer, renal failure or
PT Alzheimer's disease.

XX Example 11; Page 133; 137pp; English.

XX The present invention relates to a recombinant expression construct

CC encoding a reporter gene operably linked to a promoter from a mammalian
CC gene induced by a cyclin-dependent kinase (CDK) inhibitor. The construct
CC is useful for identifying compounds that inhibit the induction of genes
CC induced by CDK inhibitors. The compounds are useful for preventing or
CC treating a disease caused by CDK inhibitor induced gene expression, e.g.
CC cancer other than colon cancer, renal failure, Alzheimer's disease,
CC amyloidosis, age-related diseases, atherosclerosis or arthritis. The
CC present sequence is a PCR primer used to amplify a human promoter
CC suitable for use in the construct of the invention

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGACTGTCTGA 67

Db 1 ACCATGAGTGTGGATGCTGA 20

RESULT 1893

ADE64605/c

ID ADE64605 standard; DNA; 20 BP.

XX AC ADE64605;

XX 29-JAN-2004 (first entry)

XX Recombinant blood coagulation factor VIII protein related oligo #11.

XX blood coagulation factor VIII; type-A haemophilia; ss.

XX Unidentified.

XX CN1361178-A.

XX 31-JUL-2002.

XX 29-DEC-2000; 2000CN-00137779.

XX 29-DEC-2000; 2000CN-00137779.

XX (SHAN-) SHANGHAI BIO-CHEM INST CHINESE ACAD SCI.

XX Qi Z, Wang Q, Chen C;

XX WPI; 2002-741852/81.

XX New recombinant blood coagulation factor VIII and its production process
PT and medicinal composition.

XX Example 3; Page 16 (disclosure); 31pp; Chinese.

XX The invention relates to a novel recombinant blood coagulation factor
CC VIII, its production process and its medicinal composite for treating
CC type-A haemophilia. The invention further comprises a medicinal
CC composition containing the blood coagulation factor which promotes blood
CC coagulation to the blood plasma of type-A haemophilia patients. This
CC polynucleotide sequence represents an oligo relating to the recombinant
CC blood coagulation factor VIII protein of the invention.

XX Sequence 20 BP; 8 A; 3 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1504 TCCATATTTGCACCTAAGGA 1523

Db 20 TCCATATTTTTCAGTGAAGTA 1

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RESULT 1894
ADJ84167
ID ADJ84167 standard; DNA; 20 BP.
XX
AC
ADJ84167;
XX
DT 06-MAY-2004 (first entry)
XX
DE
XX Antisense 2'-MOE gapmer oligo targeted to human WRN - SEQ ID 78.
XX
DE WRN; helicase; RECQL3; cytostatic; virucide; hyperproliferative disorder;
XX cancer; premature aging; viral infection; gene therapy; antisense;
XX 2'-methoxyethyl gapmer; 2'-MOE wing; phosphorothioate backbone; ss;
XX human; chromosome 8p12.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone throughout and
FT all cytidine residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-MOE (2'-methoxyethyl) bases"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER = 2'-MOE (2'-methoxyethyl) bases"
XX
XX WO200268690-A1.
XX
XX 06-SEP-2002.
XX
XX 05-FEB-2002; 2002WO-US003574.
XX
XX 23-FEB-2001; 2001US-00791211.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-750421/81.
XX
XX New antisense oligonucleotides for modulating WRN gene expression,
XX particularly useful for preventing, delaying or treating
XX hyperproliferative disorders (e.g. cancer), conditions involving
XX premature aging or viral infection.
XX
XX Claim 3; SEQ ID NO 78; 182pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleobases in
XX length which is targeted to a nucleic acid molecule encoding WRN (RECQL3)
XX helicase and specifically hybridizes with and inhibits the expression of
XX WRN. The antisense oligonucleotide of the invention demonstrates
XX cytostatic and virucide activities and may be useful for treating an
XX animal having a disease or condition associated with WRN, such as a
XX hyperproliferative disorder, particularly cancer, or a disease or
XX condition involving premature aging or viral infection. The antisense
XX oligonucleotide may also be utilised during gene therapy procedures. The
XX current sequence is that of the antisense 2'-methoxyethyl (2'-MOE) gapmer
XX oligonucleotide of the invention which was targeted to human WRN
XX helicase. The current sequence comprises a central "gap" region of 10 2'-
XX deoxynucleotides, which is flanked on both sides by 5-nucleotide 2'-MOE
XX "wings". The backbone linkages are phosphorothioate and all cytidines are
XX 5-methylcytidines.
XX
XX Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1181 ATGAGATGCGCCACAGGCGGT 1200
DB 1 ATGTGATGCCCATAGACTGT 20

RESULT 1895
ABQ80152
ID ABQ80152 standard; DNA; 20 BP.
XX
XX ABQ80152;
XX
DT 13-JUN-2003 (first entry)
XX
DE Right primer DBM0071B amplifies IL4R amplicon of 177 bp.
XX
XX Human; interleukin 4 receptor; IL4R; type 1; diabetes; allele;
XX insulin dependent diabetes mellitus; IDDM; myasthenia gravis; PCR;
XX single nucleotide polymorphism; SNP; autoimmune disease; amplify;
XX T helper type 1 mediated disease; rheumatoid arthritis; primer;
XX multiple sclerosis; inflammatory bowel disease; systemic sclerosis;
XX systemic lupus erythematosus; psoriasis; scleroderma; Grave's disease;
XX Guillain-Barre syndrome; Hashimoto's thyroiditis; ss.
XX
XX Homo sapiens.
XX
XX WO2003010335-A2.
XX
XX 06-FEB-2003.
XX
XX 17-JUL-2002; 2002WO-EP007956.
XX
XX 20-JUL-2001; 2001US-0306912P.
XX
XX (HOFF) ROCHE DIAGNOSTICS GMBH.
XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
XX Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX
XX WPI; 2003-248086/24.
XX
XX Determining an individual's risk for type 1 diabetes, comprises detecting
XX the presence of an insulin dependent diabetes mellitus-associated
XX interleukin 4 receptor allele in a nucleic acid sample of the individual.
XX
XX Example 4; Page 35; 79pp; English.
XX
XX The sequences given in ABQ80141-52 represent primers which were used to
XX identify wild type and variant loci in the human interleukin 4 receptor
XX (IL4R). These primer sequences were used in the method of the invention
XX for determining an individual's risk for type 1 diabetes. The method
XX comprises detecting the presence of an insulin dependent diabetes
XX mellitus (IDDM)-associated interleukin 4 receptor allele in a nucleic
XX acid sample of the individual, where the presence of the allele indicates
XX the individual's risk for type 1 diabetes. The method identifies one or
XX more single nucleotide polymorphism (SNP) within the IL4R gene listed in
XX the specification. The method and the SNP's are useful for determining an
XX individual's risk for type 1 diabetes. The IL4R SNP's are also useful for
XX determining an individual's risk for any autoimmune disease or condition
XX or any T helper type 1 mediated disease, e.g. rheumatoid arthritis,
XX multiple sclerosis, inflammatory bowel disease, systemic lupus
XX erythematosus, psoriasis, scleroderma, Grave's disease, systemic
XX sclerosis, myasthenia gravis, Guillain-Barre syndrome, or Hashimoto's
XX thyroiditis
XX
XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1521 GGAGATTTCAGCTCAAAAGG 1540
```



```
Db      1  GCAGACTCAGCAACAAGAGG 20
      ||||| ||||| ||||| |||||
RESULT 1896
ACC49159/c
ID ACC49159 standard; DNA; 20 BP.
XX AC ACC49159;
XX 19-JUN-2003 (first entry)
XX ICAM-1 inhibitory antisense oligonucleotide SEQ ID NO:2.
XX Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive;
XX enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer;
XX antirheumatic; antiarthritic; cytostatic; ulcerative colitis; tumour;
XX rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
XX cellular proliferation; ss.
XX Synthetic.
XX OS
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages"
XX PN WO2003018134-A2.
XX XX
XX PD 06-MAR-2003.
XX PF 22-AUG-2002; 2002WO-US026925.
XX XX
XX PR 22-AUG-2001; 2001US-00935316.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;
XX WPI; 2003-342432/32.
XX DR
XX XX
XX PT Oral pharmaceutical formulation for delivering bioactive macromolecule
XX to mucosal surface, contains drug, bioadhesive compound, and penetration
XX enhancer.
XX PS Disclosure; Page 28; 62pp; English.
XX CC The present invention describes an oral pharmaceutical formulation (I)
XX for delivering a bioactive macromolecule to a mucosal surface. (I)
XX comprises a first population of carrier particles comprising drug and a
XX bioadhesive compound; and a second population of carrier particles
XX comprising a penetration enhancer. Also described is a method for
XX enhancing the mucosal absorption of the bioactive macromolecule in a
XX mammal (preferably a human) by mucosally administering (I). (I) has
XX antiulcer, antiinflammatory, antirheumatic, antiarthritic and cytostatic
XX activities. (I) can be used for delivering a bioactive macromolecule to
XX a mucosal surface. It is used for the oral delivery of a drug to an
XX animal encompassing a human as well as other mammals, reptiles, fish,
XX amphibians and birds. It is used to deliver drugs including peptides,
XX proteins, monoclonal antibodies their fragments, nucleic acids (DNA and
XX RNA), oligonucleotides, antisense oligonucleotides, and small molecules.
XX It can be used to examine the function of various proteins and genes in
XX an animal, including those that are essential to animal development. It
XX can be used for the treatment of animals that are known or suspected to
XX suffer from any disease treatable with the inventive composition, e.g.
XX ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory
XX bowel disease, or undue cellular proliferation (cancers and tumours). The
XX present sequence represents an exemplary oligonucleotide from the present
XX invention, which can be used to inhibit ICAM-1
XX SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGGTGGTGGCGG 245
Db 20 GAGAGGGGAAGTGGTGGGGG 1
||||| ||||| ||||| |||||
RESULT 1897
ACA97206/c
ID ACA97206 standard; DNA; 20 BP.
XX AC ACA97206;
XX 11-AUG-2003 (first entry)
XX Vpr-driven construct associated primer #39.
XX PCR; primer; Vpr; ss; immune response; immunocompromise; HIV; cancer;
XX gene therapy.
XX Unidentified.
XX OS
XX PN US2003017137-A1.
XX PD 23-JAN-2003.
XX PF 22-JUL-1998; 98US-00120286.
XX PR 22-JUL-1998; 98US-00120286.
XX PA (ALFI/) ALFIERI C.
XX PA (TANN/) TANNER J.
XX PA (ROUX/) ROUX P.
XX PI Alfieri C, Tanner J, Roux P;
XX WPI; 2003-438926/41.
XX DR
XX PT Novel DNA or RNA construct for increasing immune response of warm-blooded
XX animal, has Vpr activated promoter, DNA segment encoding interleukin 2
XX and secretory DNA encoding signal peptide functional in mammary cells.
XX PS Disclosure; Page 15; 28pp; English.
XX CC The invention relates to a DNA or RNA construct capable of expressing
XX interleukin (IL)-2 in a warm-blooded animal or biological preparation,
XX comprising a Vpr activated promoter, a transcribable DNA segment coding
XX for IL-2 and a secretory DNA encoding for a signal peptide functional in
XX mammary cells and operably linked between the promoter and the DNA
XX segment to facilitate secretion of IL-2. The construct is useful for
XX increasing the immune response of a warm-blooded animal or biological
XX preparation, by introducing the construct in stem cells, antigen
XX presenting cells or immune cell leukocytes, fibroblasts and epithelial
XX cells of the warm-blooded animal or biological preparation to obtain a
XX transfect cell populations and administering a pharmaceutically
XX effective amount of the transfect cell populations to the warm-blooded
XX animal or biological preparation. The warm-blooded animal is an
XX immunocompromised patient. The method is useful for stimulating immune
XX response in immunocompromised patients affected with HIV, cancer and
XX other immunocompromised patients. The present sequence represents a Vpr-
XX driven construct associated primer. Note: The present sequence is
XX displayed in the sequence listing but no further reference is made to it
XX in the specification
XX SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 965 AGGTGCTACACGACCTC 984
```

Db 20 ATGTGCTACACGGATACCCC 1

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

XX SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

RESULT 1898
 ADA44765
 ADA44765 standard; DNA; 20 BP.

XX ID ADA44765;
 AC ADA44765;
 XX DT 20-NOV-2003 (first entry)

XX DE Antisense oligonucleotide #ISIS 115437 #SEQ ID 63.

XX KW Antisense oligonucleotide; cytostatic; immunosuppressive;
 antiinflammatory; gene therapy; hyperproliferative disorder; cancer;
 autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;
 human.

XX KW Homo sapiens.

XX OS

XX FH Key Location/Qualifiers

XX modified_base 1..20
 PT /tag= b
 FT /mod_base= OTHER
 PT /note= "Phosphorothioate linkages, all cytosines are 5-
 methylcytosine"

XX modified_base 1..5
 PT /tag= a
 FT /mod_base= OTHER
 PT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX modified_base 16..20
 PT /tag= c
 FT /mod_base= OTHER
 PT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX W02003031576-A2.

XX PN 17-APR-2003.

XX PD 03-OCT-2002; 2002WO-US031809.

XX PF 06-OCT-2001; 2001US-00972607.

XX PR (ISIS-) ISIS PHARM INC.

XX PA Monia BP, Wyatt JR;

XX PI WPI; 2003-457242/43.

XX DR

XX New compound having sequence targeted to nucleic acid encoding inhibitor-kappa B kinase-gamma, useful for preparing composition for treating e.g., cancer, or inflammatory or autoimmune disorder.

XX Example 15; Page 77; 106pp; English.

XX The invention relates to an antisense compound that is targeted to a nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically hybridizing to the nucleic acid encoding inhibitor-kappa B kinase-gamma and inhibiting its expression. Compounds of the invention are antisense oligonucleotides comprising at least one modified internucleoside linkage, which is a 2'-O-phosphorothioate linkage, at least one modified sugar moiety, which is a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase, which is a 5-methylcytosine. Preferably, the antisense oligonucleotide is a chimeric oligonucleotide. The compound of the invention is useful for preparing a composition for treating a hyperproliferative disorder e.g., cancer, or an autoimmune or inflammatory disorder. The methods are useful for inhibiting the expression of inhibitor-kappa B kinase-gamma in cells or tissues, and treating an animal having a disease or condition associated with inhibitor-kappa B kinase-gamma. Sequences given in ADA44713-ADA44790 represent antisense oligonucleotides for the inhibition of human inhibitor-kappa B kinase-gamma mRNA levels.

XX CC

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XX DE RESULT 1900
XX ID ADA00242
XX AC ADA00242 standard; DNA; 20 BP.
XX AC ADA00242;
XX DT 06-NOV-2003 (first entry)
XX DE p38 gene PCR primer SEQ ID NO:22.
XX KW substrate; ligand; signal; ligand binding; immobilisation;
XX KW gene engineering; genetic engineering; structure; biological activity;
XX KW ligand-receptor binding; PCR primer; amplification; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO2003019199-A1.
XX PD 06-MAR-2003.
XX PF 22-AUG-2002; 2002WO-JP008444.
XX PR 22-AUG-2001; 2001JP-00250974.
XX PA (TAKA-) TAKARA BIO INC.
XX PI Ohmi T, Kato I;
XX DR WPI; 2003-290095/28.
XX PT Substrates having number of ligands immobilized on predetermined regions
XX PT of its surface, applicable in gene engineering for studying relationship
XX PT between structures and biological activity of endocrine disruptors.
XX PS Example 1; Page 33; 52pp; Japanese.
XX CC The present invention describes a substrate having a number of ligands
XX CC which have been immobilised onto a predetermined region of its surface,
XX CC in which the region on the substrate has such a shape as to allow the
XX CC concentration of signals caused by binding of the ligands to receptors in
XX CC the region toward the receiver. Also described is a substrate for the
XX CC immobilisation of such ligands. The substrates are applicable in gene
XX CC engineering for studying relationship between structures and biological
XX CC activity e.g. effect of endocrine disruptors on various genes and also in
XX CC investigating the effect of hormones, drugs and other chemicals on the
XX CC environment. Such substrates are highly sensitive in detecting the ligand
XX CC -receptor binding, with affinity and reproducibility. The ligand-
XX CC immobilised substrates can be produced in high density e.g. in microarray
XX CC form to provide finely tuned results. ADA00221 to ADA00282 represent PCR
XX CC primers used for amplifying genes in the exemplification of the present
XX CC invention.
XX SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1236 ACACCTTCATCTTCGGTATCT 1255
Db 1 AAAGTTCATCTTCGGCATCT 20

RESULT 1901
ABZ23813
ID ABZ23813 standard; DNA; 20 BP.
XX AC ABZ23813;
XX DT 18-MAR-2003 (first entry)

```

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XX DE EGFR mRNA inhibiting antisense oligonucleotide AS3.
XX KW Epidermal growth factor receptor; EGFR; cytostatic; cancer; EGFR;
XX KW antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO200290514-A2.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-US014557.
XX PR 07-MAY-2001; 2001US-0289055P.
XX PR 07-MAY-2001; 2001US-0289149P.
XX PA (HYBR-) HYBRIDON INC.
XX PI Agrawal S, Kandimalla ER;
XX DR WPI; 2003-120540/11.
XX PT New synthetic oligonucleotide complementary to nucleic acids encoding
XX PT epidermal growth factor receptor (EGFR), useful for inhibiting the EGFR
XX PT gene or mRNA expression, and reducing cancer cell proliferation.
XX PS Claim 10; Page 12; 36pp; English.
XX CC The invention relates to synthetic antisense oligonucleotides
XX CC complementary to a region of nucleic acid encoding epidermal growth
XX CC factor receptor (EGFR) with location 245-1117, 2407-3201, 3786-4102 or
XX CC 4574-43633. The methods and compositions of the invention are useful for
XX CC enhancing inhibition of EGFR gene or mRNA expression, and reducing cancer
XX CC cell proliferation, in particular cancer cells of the colon, ovarian or
XX CC breast. Sequences ABZ23811-832 represent specific examples of such
XX CC antisense oligonucleotides that inhibit the EGFR mRNA expression
XX SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1553 GGTCTTCGTCGATGCGCTGAC 1572
Db 1 GGTCTTCGTCGATGCTGCGC 20

RESULT 1902
ABX78149/C
ID ABX78149 standard; DNA; 20 BP.
XX AC ABX78149;
XX DT 16-APR-2003 (first entry)
XX DE Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100812.
XX KW p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
XX KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;
XX KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.
XX OS Mus musculus.
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "nucleotides 1-5 & 16-20 are 2'-methoxyethoxy
XX FT (MOE) nucleotides, nucleotides 1-4 & 16-19 are linked
XX FT via phosphodiester linkages, nucleotides 6-15 are 2'-

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```
FT deoxy- nucleotides, nucleotides 5-16 are linked via
FT phosphorothioate linkages, all C nucleotides are 5-
FT methyl cytosines"
XX
PN US6448079-B1.
XX
XX 10-SEP-2002.
XX
XX 15-AUG-2000; 2000US-00640101.
XX
XX 06-APR-1999; 99US-00286904.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Gaarde WA, Nero P, Mckay R;
XX WPI; 2003-089122/08.
XX
XX New antisense compound, useful for preparing a composition for
XX diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
XX arthritis.
XX
XX Example 5; Col 27-28; 44pp; English.
XX
XX This invention describes a novel antisense compound, which is 8-30
XX nucleobases in length targeted to a nucleic acid molecule encoding p38
XX mitogen-activated protein kinase (MAPK). The products of the invention
XX have antiarthritic and antiinflammatory activity, can act as
XX kinase inhibitors. The antisense compound is useful for preparing a
XX composition for diagnosing, treating or preventing inflammatory diseases,
XX e.g. rheumatoid arthritis or for use in antisense gene therapy. This
XX sequence represents an antisense oligonucleotide used in a method to
XX inhibit p38 MAPK
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1153 GACATGTGGGCTGTGGGCTG 1172
XX ||||| ||||| ||||| |||||
XX Db 20 GACATCTGGTCTGTGGCTG 1
XX
XX RESULT 1903
XX ABZ74963
XX ID ABZ74963 standard; DNA; 20 BP.
XX AC ABZ74963;
XX
XX 10-MAY-2003 (first entry)
XX
XX Human p70 S6 kinase phosphorothioate antisense oligo, SEQ ID NO:21.
XX
XX Human; p70 S6 kinase; SK6; p70/p85 S6 kinase; pp70s6k;
XX p70/p85 ribosomal S6 kinase; serine-threonine kinase;
XX ribosomal S6 protein phosphorylation; protein synthesis;
XX cell cycle progression; immune response; signalling cascade;
XX cancer progression; lipotoxic disorder; obesity; metabolic disorder;
XX hyperproliferative disorder; cancer; cytostatic; expression inhibition;
XX phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages. When bases 1-5 and 16-
XX 20 are not 2'-methoxyethyl (2'-MOE) nucleotides, all
XX cytosines in the oligonucleotide are 5-methylcytosine"
XX modified_base 1..5
XX OS
```

```
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
FT All 2' MOE cytosines are 5-methylcytosine"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
FT All 2' MOE cytosines are 5-methylcytosine"
XX
XX WO2003012032-A2.
XX
XX 13-FEB-2003.
XX
XX 19-JUL-2002; 2002WO-US023123.
XX
XX 01-AUG-2001; 2001US-00920677.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowser LM;
XX WPI; 2003-239516/23.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding p70
XX S6 kinase, and inhibits expression of p70 S6 kinase, useful for treating
XX a condition associated with p70 S6 kinase, e.g. cancer.
XX
XX Claim 3; Page 73; 93pp; English.
XX
XX Sequences ABZ74952-ABZ74991 represent antisense oligonucleotides targeted
XX to the human p70 S6 kinase gene, which inhibit its expression. The
XX antisense oligonucleotides were designed to target different regions of
XX the human p70 S6 kinase RNA, and were analysed for their effect on mRNA
XX levels by quantitative real-time PCR. p70 S6 kinase (also known as SK6,
XX p70/p85 S6 kinase, p70/p85 ribosomal S6 kinase and pp70s6k) is a serine-
XX threonine kinase responsible for the phosphorylation of the ribosomal S6
XX protein, which in turn stimulates protein synthesis. p70 S6 kinase is
XX function is essential for cell cycle progression, and has also been
XX implicated in the regulation of the immune response. p70 S6 kinase is
XX itself activated via phosphorylation, a process influenced by upstream
XX signalling cascades and by hyperinsulinaemia, and may play a role in the
XX progression of colon cancer and in the development of lipotoxic disorders
XX and obesity. The oligonucleotides of the invention are useful for the
XX prevention and treatment of conditions associated with p70 S6 kinase,
XX such as hyperproliferative disorders such as cancer, and metabolic
XX disorders. They are also useful in research and diagnostics for
XX modulating the expression of p70 S6 kinase
XX
XX Sequence 20 BP; 1 A; 11 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 561 CCGCGGCTCTCGTGTGTCTCA 580
XX ||||| ||||| ||||| |||||
XX Db 1 CCGGCTCTCTCGTGTGTCTCA 20
XX
XX RESULT 1904
XX ABT43268
XX ID ABT43268 standard; DNA; 20 BP.
XX AC ABT43268;
XX
XX 22-SEP-2003 (first entry)
XX
XX Neuroblastoma-related DNA sequence #183.
XX
XX Neuroblastoma; prognosis; ds; oligonucleotide.
XX
XX Unidentified.
XX OS
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XX PN WO2002103017-A1.
XX PD 27-DEC-2002.
XX PF 30-MAY-2002; 2002WO-IP005295.
XX PR 31-MAY-2001; 2001JP-00163666.
XX PR 24-AUG-2001; 2001JP-0025260.
XX PA (CHIB-) CHIBA PREFECTURE.
XX PA (HISM ) HISAMITSU PHARM CO LTD.
XX PI Nakagawara A;
XX DR WPI; 2003-167523/16.
XX PT Nucleic acids isolated from neuroblastoma showing enhanced expression in
XX PT human neuroblastoma with good prognosis, useful in clarifying good/poor
XX PT prognosis of neuroblastoma and providing genetic data.
XX PS Example 5; Page 24(1); 444pp; Japanese.
XX CC The invention comprises DNA sequences that show enhanced expression in
XX CC human neuroblastoma with good prognosis. The DNA sequences of the
XX CC invention are useful in clarifying good/poor prognosis of neuroblastoma.
XX CC The present DNA sequence was used in the exemplification of the invention
XX SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 316 TCTGCACCAGAGATTGTGCA 335
DB 1 TCTGCACCAGAGATTCTACA 20

RESULT 1905
ABQ80265/c
ID ABQ80265 standard; cDNA; 20 BP.
XX AC ABQ80265;
XX DT 27-JUN-2003 (first entry)
XX DE FLT-4 primer #2.
XX KW PCR; nervous system; platelet-derived growth factor; PDGF; psychosis;
XX KW vascular endothelial growth factor; VEGF; neural; stem cell; memory;
XX KW progenitor cell; neurodegeneration; ischaemia; neurological trauma;
XX KW neuropsychiatry; learning; Parkinson's disease; Huntington's disease;
XX KW Amyotrophic Lateral Sclerosis; spinal ischaemia; ischaemic stroke;
XX KW spinal cord injury; cancer-related; schizophrenia; Alzheimer's disease;
XX KW depression; anxiety; phobia; stress; cognitive function; aggression;
XX KW drug; alcohol; abuse; obsessive compulsive behaviour; proliferation;
XX KW seasonal mood disorder; personality disorder; cerebral palsy; primer;
XX KW multi-infarct; dementia; Lewy body; age related; geriatric; growth;
XX KW epilepsy; brain injury; multiple sclerosis; autism; differentiation;
XX KW attention deficit disorder; narcolepsy; amplify; ss.
XX OS Homo sapiens.
XX PN WO2003024478-A1.
XX PD 27-MAR-2003.
XX PF 19-SEP-2002; 2002WO-IB003998.
XX PR 19-SEP-2001; 2001US-0323381P.
XX PR 28-SEP-2001; 2001US-0326044P.
XX

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PA (NEUR-) NEURONOVA AB.
XX Delfani K, Janson AM, Kuhn GH, Plate K, Schanzer A, Wachs F;
XX Zhao M;
XX WPI; 2003-354563/33.
XX PT Use of platelet-derived growth factor, vascular endothelial growth
XX PT factor, or their modulators for modulating neural stem cell or neural
XX PT progenitor cell activity, particularly for treating e.g. Alzheimer's,
XX PT ischaemia or stroke.
XX PS Example 11; Page 77; 119pp; English.
XX CC The sequences given in ABQ80256-69 are primers which were used to
XX CC identify the presence of vascular endothelial growth factor (VEGF), or
XX CC the VEGF receptors, Flk1, FLT-1 and FLT-4 in human stem cells (HSC). The
XX CC method of the invention for alleviating or reducing a symptom of a
XX CC disease or disorder of the nervous system comprises administering
XX CC platelet-derived growth factor (PDGF), vascular endothelial growth factor
XX CC (VEGF), a combination of PDGF and VEGF, or a PDGF or VEGF agonist, to a
XX CC patient in order to modulate neural stem cell or neural progenitor cell
XX CC activity in vivo. The method is useful for alleviating or reducing the
XX CC symptoms of a disease or disorder of the nervous system, e.g.
XX CC neurodegenerative disorders, neural stem cell disorders, neural
XX CC progenitor disorders, ischaemic disorders, neurological traumas,
XX CC affective disorders, neuropsychiatric disorders or learning and memory
XX CC disorders. In particular, the method is useful for alleviating or
XX CC treating Parkinson's disease and disorders, Huntington's disease,
XX CC Alzheimer's disease, Amyotrophic Lateral Sclerosis, spinal ischaemia,
XX CC ischaemic stroke, spinal cord injury or cancer-related brain/spinal cord
XX CC injury, schizophrenia and other psychoses, depression, bipolar
XX CC depression/disorder, anxiety syndromes/disorders, phobias, stress and
XX CC related syndromes, cognitive function disorders, aggression, drug and
XX CC alcohol abuse, obsessive compulsive behaviour syndromes, seasonal mood
XX CC disorder, borderline personality disorder, cerebral palsy, life style
XX CC drug, multi-infarct dementia, Lewy body dementia, age related/geriatric
XX CC dementia, epilepsy and injury related to epilepsy, spinal cord injury,
XX CC brain injury, trauma related brain/spinal cord injury, infection and
XX CC treatment related brain/spinal cord tissue injury, infection and
XX CC inflammation related brain/spinal cord injury, multiple sclerosis, autism, attention
XX CC deficit disorders, narcolepsy or sleep disorders. The PDGF and/or VEGF,
XX CC is useful in the manufacture of a medicament for alleviating or treating
XX CC these diseases or disorders, accelerating growth of neural stem cells or
XX CC neural progenitor cells, or inducing proliferation or differentiation of
XX CC these cells. This primer gives an estimated band size of 378 bp
XX SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 514 CTGAGAGAGCTGACCCCTCAA 533
DB 20 CTGTGAGAGCTGCCCGTGA 1

RESULT 1906
ACF33771
ID ACF33771 standard; DNA; 20 BP.
XX AC ACF33771;
XX DT 24-SEP-2003 (first entry)
XX DE Human CREB phosphorothioate antisense oligonucleotide, SEQ ID NO:29.
XX KW Human; CREB; cAMP response element binding protein; CREB1; bZIP;
XX KW basic leucine zipper; transcription factor; intracellular signalling;
XX KW spermatogenesis; circadian rhythm; memory; apoptosis;
XX KW hyperproliferative disorder; cancer; tumour; blood; soft tissue;

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KW apoptosis related disease; neuronal disorder; chromosome 2q32.3-34;
KW cytostatic; neuroprotective; expression inhibition; phosphorothioate;
KW antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone with all cytosine residues being 5-
FT methylcytosines. Optionallly, it also has 2-
FT 'methoxyethyl (2'-MOE) wings at the 5' and 3' ends,
FT which are 5 nucleotides in length"
XX
PN WO2003030617-A2.
XX
XX 17-APR-2003.
PD
XX
XX 07-OCT-2002; 2002WO-US032181.
PF
XX
XX 10-OCT-2001; 2001US-00973827.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Monia BP, Cowser LM;
PI
XX WPI; 2003-381663/36.
DR
XX
XX New antisense oligonucleotides for modulating CREB (cAMP response element
PT binding protein) gene expression, useful for preventing or treating e.g.
PT cancers, a disease arising from aberrant apoptosis, or neuronal
PT disorders.
XX
XX Claim 3; Page 74; 91pp; English.
PS
XX The invention relates to antisense oligonucleotides (ACF33752-ACF33779)
CC targeted to the human CREB (cAMP response element binding protein) gene,
CC which inhibit its expression. The oligonucleotides were designed to
CC target different regions of human CREB mRNA, and were analysed for their
CC effect on CREB expression by quantitative real-time PCR. CREB (also known
CC as CREB1) is a member of the basic leucine zipper (bZIP) family of
CC transcription factors, and activates transcription of target genes in
CC response to a diverse array of stimuli including peptide hormones, growth
CC factors and protein kinases. It is a component of intracellular
CC signalling events which regulate a wide variety of biological functions,
CC including spermatogenesis, circadian rhythms and memory. Overexpression
CC of CREB has been found to induce apoptosis in certain cells, although
CC CREB overexpression may also be linked to cancer as it is constitutively
CC activated in human somatotroph adenomas. CREB may also play a role in the
CC development of drug dependency, as it has been found to mediate morphine-
CC induced upregulation of the cAMP pathways that contribute to opiate
CC dependency. The oligonucleotides of the invention are useful for
CC diagnosis, prevention and treatment of CREB-related disorders, such as
CC hyperproliferative disorders (particularly cancer, e.g. those of blood
CC and soft tissue), diseases or conditions arising from aberrant apoptosis,
CC or neuronal disorders. The present sequence represents a human H-ras
CC phosphorothioate antisense oligonucleotide used as a positive control in
CC determining optimal oligonucleotide concentration for a particular cell
CC line
XX
XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 294 TTCTGCACGGGGCCCACTCA 313
DB 1 TTATGCATGCGGCCACACA 20

RESULT 1907
ABT32380
ID ABT32380 standard; DNA; 20 BP.
XX
XX
AC ABT32380;
XX
XX 08-MAY-2003 (first entry)
XX
XX Neuroblastoma-related oligonucleotide #157.
XX
XX Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
KW high malignancy.
XX
XX Unidentified.
OS
XX WO200297093-A1.
PN
XX
XX 05-DEC-2002.
XX
XX 30-MAY-2002; 2002WO-JP005294.
PF
XX
XX 30-MAY-2001; 2001JP-00162775.
PR
XX 24-AUG-2001; 2001JP-00255226.
PR
XX
XX (CHIB-) CHIBA PREFECTURE.
PA
XX (HISM) HISAMITSU PHARM CO LTD.
PA
XX Nakagawara A;
PI
XX WPI; 2003-140476/13.
DR
XX
XX Nucleic acids having higher expression in human neuroblastoma with poor
PT prognosis for diagnostic prediction of neuroblastoma prognosis.
PT
XX
XX Example 5; Page 27; 111pp; Japanese.
PS
XX The invention comprises nucleic acids that show increased expression in
CC human neuroblastomas with poor prognosis over those with a good
CC prognosis. The nucleic acids of the invention are useful as a tool for
CC distinguishing neuroblastomas with a favourable prognosis (spontaneous
CC regression) from neuroblastomas with a poor prognosis (high malignancy).
CC The DNA sequences ABT32244 - ABT32571 represent oligonucleotides used in
CC an example of the invention
XX
XX Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 316 TCTGCACCAAGAGATTGTGCA 335
DB 1 TCTGCACCAAGAGATTGTGCA 20

RESULT 1908
ADA20854/c
ID ADA20854 standard; DNA; 20 BP.
XX
XX ADA20854;
AC
XX
XX 20-NOV-2003 (first entry)
XX
XX Human BAX chimeric phosphorothioate oligonucleotide SEQ ID NO:27.
XX
XX BCL2-associated X; BAX; nontropic; neuroprotective; antiparkinsonian;
KW anticonvulsant; ophthalmological; antidiabetic; virucide;
KW antisense therapy; BAX antagonist; BAX inhibitor;
KW familial amyotrophic lateral sclerosis; Alzheimer's disease;
KW Parkinson's disease; Hodgkin's disease; cartilage-hair hyperplasia;
KW diabetes-associated ocular disorder; scrapie infection;
KW aberrant apoptosis; human; phosphorothioate; ss.
XX

```
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages, and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2003008543-A2.
XX
PD 30-JAN-2003.
XX
PF 13-JUL-2002; 2002WO-US022417.
XX
PR 17-JUL-2001; 2001US-00908147.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Zhang H, Watt AT;
XX
DR WPI; 2003-239321/23.
XX
XX
XX New antisense compounds, useful for modulating the expression of BCL2-
XX associated X (BAX) protein or for treating a disease or condition
XX associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease
XX or Alzheimer's disease.
XX
XX Example 15; Page 85; 139pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding BCL2-associated X (BAX)
XX protein, where the compound specifically hybridises with the nucleic acid
XX molecule encoding BAX protein and inhibits the expression of BAX protein.
XX The compound specifically hybridises with at least 8-nucleobase portion
XX of an active site on a nucleic acid molecule encoding BAX protein. Also
XX described: (1) a composition comprising (I) and a pharmaceutical carrier
XX or diluent; (2) inhibiting the expression of BAX protein in cells or
XX tissues comprising contacting the cells or tissues with (I); and (3)
XX treating an animal having a disease or condition associated with BAX
XX protein comprising administering to the animal (I) so that expression of
XX BAX protein is inhibited. (I) has neurotropic, neuroprotective,
XX antiparkinsonian, anticonvulsant, ophthalmological, antidiabetic and
XX antagonist. The antisense compounds (I) are useful for modulating the
XX expression of BAX protein, and for treating a disease or condition
XX associated with BAX protein, e.g. familial amyotrophic lateral
XX sclerosis, Alzheimer's disease, Parkinson's disease, Hodgkin's disease,
XX cartilage-hair hyperplasia, diabetes-associated ocular disorders or
XX scrapie infection, or a condition that arises from aberrant apoptosis.
XX The compounds are useful as research reagents and in diagnostics. The
XX present sequence represents a human BAX chimeric phosphorothioate
XX oligonucleotide, which is used in an example from the present invention.
XX
SQ Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 77 GAGGGCCCCGGCTCTGAG 96
Db 20 GGGGGCCCCACCAGCTCTGAG 1
```

```
RESULT 1909
ADA20960
ID ADA20960 standard; DNA; 20 BP.
XX
XX ADA20960;
AC
XX
DT 20-NOV-2003 (first entry)
XX
DE Mouse BAX chimeric phosphorothioate oligonucleotide SEQ ID NO:133.
XX
XX BCL2-associated X; BAX; neurotropic; neuroprotective; antiparkinsonian;
XX anticonvulsant; ophthalmological; antidiabetic; virucide;
XX antisense therapy; BAX antagonist; BAX inhibitor;
XX familial amyotrophic lateral sclerosis; Alzheimer's disease;
XX Parkinson's disease; Hodgkin's disease; cartilage-hair hyperplasia;
XX diabetes-associated ocular disorder; scrapie infection;
XX aberrant apoptosis; mouse; phosphorothioate; ss.
XX
OS Synthetic.
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages, and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2003008543-A2.
XX
PD 30-JAN-2003.
XX
PF 13-JUL-2002; 2002WO-US022417.
XX
PR 17-JUL-2001; 2001US-00908147.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Zhang H, Watt AT;
XX
DR WPI; 2003-239321/23.
XX
XX
XX New antisense compounds, useful for modulating the expression of BCL2-
XX associated X (BAX) protein or for treating a disease or condition
XX associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease
XX or Alzheimer's disease.
XX
XX Example 17; Page 94; 139pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding BCL2-associated X (BAX)
XX protein, where the compound specifically hybridises with the nucleic acid
XX molecule encoding BAX protein and inhibits the expression of BAX protein.
XX The compound specifically hybridises with at least 8-nucleobase portion
XX of an active site on a nucleic acid molecule encoding BAX protein. Also
XX described: (1) a composition comprising (I) and a pharmaceutical carrier
XX or diluent; (2) inhibiting the expression of BAX protein in cells or
XX tissues comprising contacting the cells or tissues with (I); and (3)
XX treating an animal having a disease or condition associated with BAX
XX protein comprising administering to the animal (I) so that expression of
XX BAX protein is inhibited. (I) has neurotropic, neuroprotective,
XX antiparkinsonian, anticonvulsant, ophthalmological, antidiabetic and
XX antagonist. The antisense compounds (I) are useful for modulating the
XX expression of BCL2-associated X (BAX) protein or for treating a disease or condition
XX associated with BAX protein, e.g. Parkinson's disease, Hodgkin's disease
XX or Alzheimer's disease.
XX
XX Example 17; Page 94; 139pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding BCL2-associated X (BAX)
XX protein, where the compound specifically hybridises with the nucleic acid
XX molecule encoding BAX protein and inhibits the expression of BAX protein.
XX The compound specifically hybridises with at least 8-nucleobase portion
XX of an active site on a nucleic acid molecule encoding BAX protein. Also
XX described: (1) a composition comprising (I) and a pharmaceutical carrier
XX or diluent; (2) inhibiting the expression of BAX protein in cells or
XX tissues comprising contacting the cells or tissues with (I); and (3)
XX treating an animal having a disease or condition associated with BAX
XX protein comprising administering to the animal (I) so that expression of
XX BAX protein is inhibited. (I) has neurotropic, neuroprotective,
XX antiparkinsonian, anticonvulsant, ophthalmological, antidiabetic and
XX antagonist. The antisense compounds (I) are useful for modulating the
```

CC expression of BAX protein, and for treating a disease or condition
 CC associated with BAX protein, e.g. familial amyotrophic lateral
 CC sclerosis, Alzheimer's disease, Parkinson's disease, Hodgkin's disease,
 CC cartilage-hair hyperplasia, diabetes-associated ocular disorders or
 CC scrapie infection, or a condition that arises from aberrant apoptosis.
 CC The compounds are useful as research reagents and in diagnostics. The
 CC present sequence represents a mouse BAX chimeric phosphorothioate
 CC oligonucleotide, which is used in an example from the present invention.
 XX
 SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03; Mismatches 4; Indels 0; Gaps 0;

Matches 16; Conservative 0;

QY 392 CGGATGAGTGCAGTCTCCA 411

Db 1 CGGAGGAGTGCAGTCTCCA 20

RESULT 1910

ID ACF39671 standard; DNA; 20 BP.

XX ACF39671;

XX 29-SEP-2003 (first entry)

DE MHC class II transactivator antisense oligonucleotide SEQ ID NO:74.

XX Human; major histocompatibility complex class II transactivator;
 KW MHC class II transactivator; antisense modulation; immunosuppressive;
 KW antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic;
 KW neurotropic; neuroprotective; immunostimulant; autoimmune disorder;
 KW MHC class II transactivator inhibitor; infection; transplant rejection;
 KW diabetes; rheumatoid arthritis; cancer; Alzheimer's disease;
 KW multiple sclerosis; severe combined immunodeficiency disease;
 KW phosphorothioate; antisense oligonucleotide; ss.

OS Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers

modified_base 1. .20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages; all cytidine residues
 FT are 5-methylcytidines"

FT modified_base 1. .5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16. .20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2003050247-A2.

XX 19-JUN-2003.

XX 04-DEC-2002; 2002WO-US038616.

XX 05-DEC-2001; 2001US-00006366.

XX (ISIS-) ISIS PHARM INC.

XX Bennett FC, Dobie KW;

XX WPI; 2003-577294/54.

XX New antisense oligonucleotides for modulating MHC class II transactivator
 PT gene expression, particularly useful for treating autoimmune disorders

PT such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
 PT or infection.

XX Example 15; Page 84; 129pp; English.

XX The present invention describes a compound (I) that is 8-50 nucleobases
 CC in length: (a) targets a nucleic acid molecule encoding major
 CC histocompatibility complex (MHC) class II transactivator, and
 CC specifically hybridizes with the nucleic acid encoding the MHC class II
 CC transactivator, and inhibits the expression of MHC class II
 CC transactivator; or (b) specifically hybridizes with at least an 8-
 CC nucleobase portion of an active site on a nucleic acid molecule encoding
 CC MHC class II transactivator. (I) has immunosuppressive, antimicrobial,
 CC antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic,
 CC neuroprotective and immunostimulant activities, and can be used as an MHC
 CC class II transactivator inhibitor. The MHC class II transactivator
 CC antisense oligonucleotides can be used for treating an animal having a
 CC disease or condition associated with MHC class II transactivator, e.g.
 CC autoimmune disorder or infection. The antisense oligonucleotides can be
 CC used for inhibiting the expression of MHC class II transactivator in
 CC cells or tissues. In particular, these diseases include transplant
 CC rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease,
 CC multiple sclerosis, or severe combined immunodeficiency disease. The
 CC antisense compounds are useful for diagnostics, prophylaxis, or as
 CC research reagents or kits. The present sequence represents a human MHC
 CC class II transactivator chimeric phosphorothioate antisense
 CC oligonucleotide, which is used in an example from the present invention

XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 865 AGCAGTACTGATGATCTG 884

Db 1 AAGCTGAACCTGATGCTGAG 20

RESULT 1911

AAAL61864

ID AAL61864 standard; DNA; 20 BP.

XX AAL61864;

XX 22-SEP-2003 (first entry)

XX Human ETBR-LP-2 antisense oligonucleotide ISIS #204290.

XX Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;
 KW endothelin type b receptor-like protein-2; cerebral vascular disease;
 KW antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
 KW cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;
 KW acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;
 KW angiogenesis; hypertension; phosphorothioate; ss.

OS Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers

modified_base 1. .20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate backbone; All cytidine residues
 FT are 5-methylcytidines"

FT modified_base 1. .5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT modified_base 16. .20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"


```

XX PN WO2003050244-A2.
XX FT
XX PD
XX PF 04-DEC-2002; 2002WO-US038520.
XX PR 06-DEC-2001; 2001US-00003126.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Freier SM;
XX XX WPI; 2003-558997/52.
XX DR
XX PT New oligonucleotides which bind the nucleic acid encoding the G protein
XX PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2
XX PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
XX PS Claim 3; Page 80; 106pp; English.
XX CC The invention relates to antisense compounds targetted to the nucleic
XX CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b
XX CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also
XX CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2
XX CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
XX CC of the invention are useful for treating hyperproliferative disorders
XX CC (especially cancer) and cardiovascular diseases especially angiogenesis,
XX CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
XX CC acute proliferative nephropathy. The present sequence is an antisense
XX CC oligonucleotide targetted to human ETBR-LP-2 DNA
XX SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1049 GAGCCAAAGTCAATCCCAACA 1068
DB 1 GAACCAAGTCCATCCTCTAGA 20
RESULT 1912
AAL61863
ID AAL61863 standard; DNA; 20 BP.
AC AAL61863;
XX AC
XX DT 22-SEP-2003 (first entry)
XX DE Human ETBR-LP-2 antisense oligonucleotide ISIS #204289.
XX KW Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;
XX KW endothelin type b receptor-like protein-2; cerebral vascular disease;
XX KW antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
XX KW cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;
XX KW acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;
XX KW angiogenesis; hypertension; phosphorothioate; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone; All cytidine residues
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

```

```

FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN WO2003050244-A2.
XX XX 19-JUN-2003.
XX PD
XX XX 04-DEC-2002; 2002WO-US038520.
XX PF 06-DEC-2001; 2001US-00003126.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Monia BP, Freier SM;
XX XX WPI; 2003-558997/52.
XX DR
XX PT New oligonucleotides which bind the nucleic acid encoding the G protein
XX PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2
XX PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
XX PS Example 15; Page 80; 106pp; English.
XX CC The invention relates to antisense compounds targetted to the nucleic
XX CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b
XX CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also
XX CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2
XX CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
XX CC of the invention are useful for treating hyperproliferative disorders
XX CC (especially cancer) and cardiovascular diseases especially angiogenesis,
XX CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
XX CC acute proliferative nephropathy. The present sequence is an antisense
XX CC oligonucleotide targetted to human ETBR-LP-2 DNA
XX SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1052 CCAAGTCAATCCCAACAAG 1071
DB 1 CCAAGTCCATCCTCTAGACAG 20
RESULT 1913
ACD99549/c
ID ACD99549 standard; DNA; 20 BP.
XX AC ACD99549;
XX DT 25-SEP-2003 (first entry)
XX DE Immunostimulatory nucleic acid #235.
XX KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
XX KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX OS Synthetic.
XX PN US2003050268-A1.
XX PD 13-MAR-2003.
XX PF 29-MAR-2002; 2002US-00112653.
XX PR 29-MAR-2001; 2001US-0279642P.
XX PA (KRIE/) KRIEG A M.

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```

PA (BERG/) BERG D J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 15; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
XX disease comprising administering to a subject having or at risk of
XX developing a non-allergic inflammatory disease an immunostimulatory
XX nucleic acid for prevention or treatment of the disease. The method is
XX useful for treating non-allergic inflammatory diseases, such as
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 555 CCTCAGCGCGCGCTCGTC 574
Db 20 CGCGCGCGCGCGCGCGCC 1

RESULT 1914
ADA15368/c
ID ADA15368 standard; DNA; 20 BP.
AC ADA15368;
XX
XX 06-NOV-2003 (first entry)
DT
XX
XX Mouse HYPLIPI locus PCR primer #308.
DE
XX
XX Mouse; PCR; primer; ss; HYPLIPI; FCHL1; variation; lipid disorder;
XX allele; anti-lipid disorder; anti-cancer therapy; gene therapy;
XX familial combined hyperlipidaemia; coronary artery disease;
XX atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;
XX hypertriglyceridaemia; low density lipoprotein subclass B; LDL;
XX familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;
XX obesity; insulin resistance; cancer; cytostatic; antilipaemic;
XX hypotensive; anorectic.
XX
XX Mus sp.
OS
XX
XX US2003064372-A1.
XX
XX 03-APR-2003.
XX
XX 07-SEP-2001; 2001US-00949428.
XX
XX 22-JUN-2000; 2000US-0213322P.
XX
XX (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
XX Ohmen J, Ross D, Tafuri S, Wu C;

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XX WPI; 2003-540780/51.
XX
XX Novel isolated polynucleotide comprising a mouse or human familial
XX combined hyperlipidaemia 1 gene having a variation that is associated with
XX a lipid disorder, useful for identifying susceptibility to the lipid
XX disorder.
XX
XX Claim 11; Page 40; 63pp; English.
XX
XX The invention discloses isolated polynucleotides comprising mouse HYPLIPI
XX cDNA sequence, mouse HYPLIPI genomic DNA, or the homologous human
XX familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in
XX the sequence is associated with a lipid disorder. Also claimed is an
XX isolated polypeptide comprising a variant form of the mouse HYPLIPI amino
XX acid sequence, or a variant form of a fully defined human FCHL1 amino
XX acid sequence, where the variant is associated with the lipid disorder,
XX an isolated polynucleotide having at least 12 contiguous nucleotides of
XX the isolated polynucleotides, where the 12 contiguous nucleotides span
XX the variation position, an isolated polypeptide comprising 4 contiguous
XX amino acids of the encode polypeptides, where the 4 contiguous amino
XX acids span the variation position, a kit for the detection of the FCHL1
XX locus comprising, an isolated antibody, identifying susceptibility to a
XX lipid disorder which comprises comparing the nucleotide sequence of the
XX suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where
XX the difference between the suspected allele and the wild-type sequence
XX identifies a sequence variation of FCHL1 nucleotide sequence and a
XX pharmaceutical composition. Also disclosed is a transgenic animal which
XX carries an altered HYPLIPI or FCHL1 allele and a method for screening
XX drugs for inhibition or restoration of FCHL1 gene function as an anti-
XX lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides
XX and antibodies are useful for treating or preventing (e.g. gene therapy)
XX a lipid disorder associated with expression of FCHL1, for diagnosis or
XX prognosis of predisposition to lipid disorder, and cancer and for
XX treating a lipid disorder such as familial combined hyperlipidaemia,
XX coronary artery disease, atherogenic lipoprotein phenotype
XX hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density
XX lipoprotein (LDL) subclass B, familial dyslipidemic hypertension,
XX syndrome X, hypercholesterolaemia, obesity, insulin resistance and
XX cancer. The sequence presented is a PCR primer which was used to amplify
XX part of the mouse HYPLIPI locus.
XX
XX Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 16 GGATGGACAGGAATGCAGAG 35
Db 20 GGATGGAGAGGCATCCTGAG 1

RESULT 1915
ACF04246
ID ACF04246 standard; DNA; 20 BP.
XX
XX ACF04246;
XX
XX 06-NOV-2003 (first entry)
DT
XX
XX Murine embryonic cell line Ptc PCR primer #1.
XX
XX Embryonic stem cell; ES cell; mouse; differentiation; nerve cell;
XX pancreatic islet cell; cell transplant therapy; antidiabetic;
XX neuroprotective; nootropic; PCR; primer; ss.
XX
XX Mus sp.
OS
XX
XX WO2003062405-A2.
XX
XX 31-JUL-2003.
XX

```


PA (LUSI/) LUSIS A J.
 PA (OHME/) OHMEN J.
 PA (ROSS/) ROSS D.
 PA (TAFU/) TAFURI S.
 PA (WUCC/) WU C.
 XX
 XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusia AJ;
 PI Ohmen J, Ross D, Tafari S, Wu C;
 FI
 XX WPI; 2003-695901/66.
 DR
 XX Novel human FCHL1 or mouse HYPLIPI polypeptide, useful for drug
 PT screening, peptide therapy of lipid disorder or cancer.
 XX
 XX Claim 11; Page 38; 56pp; English.
 PS
 XX The invention describes an isolated polypeptide (I) comprising a variant
 CC form of a mouse HYPLIPI polypeptide sequence (S1) or a human FCHL1
 CC polypeptide sequence (S2), not given in the specification, where the
 CC variant form is associated with cancer, or an amino acid sequence having
 CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
 CC DNA encoding (I) is useful for treating or preventing cancer associated
 CC with expression of FCHL1. FCHL1 gene or HYPLIPI gene and its product are
 CC useful for the study of metabolic pathway and cellular mechanism to
 CC identify other genes, receptors and relationships that contribute to
 CC lipid disorder and cancer. FCHL1 gene or its fragments are useful in gene
 CC therapy to increase the amount of the expression products of the gene for
 CC the treatment of lipid disorder or cancerous cells. The sequence
 CC variation of FCHL1 gene or HYPLIPI gene is also useful in the diagnosis
 CC and prognosis of predisposition to lipid disorder and cancer. Antisense
 CC polynucleotide sequences are useful in preventing or diminishing the
 CC expression of HYPLIPI or FCHL1 locus. This sequence represents a primer
 CC used in the analysis of the mouse HYPLIPI gene.
 XX
 XX Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 16 GGATGGACAGGAGTGCAGAG 35
 DB 20 GGATGGAGAGGCATCTGAG 1
 RESULT 1918
 ADB36618/c
 ID ADB36618 standard; DNA; 20 BP.
 XX
 AC ADB36618;
 XX
 DT 04-DEC-2003 (first entry)
 DE Immunostimulatory nucleic acid #232.
 XX
 XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX
 OS Synthetic.
 XX
 XX US2003087848-A1.
 XX
 XX 08-MAY-2003.
 XX
 XX 02-FEB-2001; 2001US-00776479.
 XX
 XX 03-FEB-2000; 2000US-0179991P.
 XX
 XX (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 FI

XX WPI; 2003-657977/62.
 DR
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 PT
 XX Disclosure; Page 8; 221pp; English.
 XX
 XX The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX
 XX Sequence 20 BP; 0 A; 6 C; 14 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 555 CCTCAGCGCGCGCTCGTC 574
 DB 20 CCGCGCGCGCGCGCGCGCC 1
 RESULT 1919
 ADB65935/c
 ID ADB65935 standard; DNA; 20 BP.
 XX
 AC ADB65935;
 XX
 DT 04-DEC-2003 (first entry)
 DE Clone specific PCR primer #136.
 XX
 XX Pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KW cell regeneration; membrane protein; signal transduction-related protein;
 KW transcription-related protein; osteoporosis; neurological disease;
 KW cancer; tumour; primer; PCR; ss.
 XX
 OS Homo sapiens.
 XX
 XX EPI1308459-A2.
 XX
 XX 07-MAY-2003.
 XX
 XX 28-MAR-2002; 2002EP-00007401.
 XX
 XX 05-NOV-2001; 2001JP-00379298.
 XX
 XX 25-JAN-2002; 2002US-00350978.
 XX
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
 XX
 XX WPI; 2003-450961/43.
 DR
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 XX Example 8; Page 129; 222pp; English.
 PS
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide

CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is clone specific PCR primer which was used in the
 CC expression analysis of the genes of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 154 CTGTCAATGACACTCCGAGG 173
 ||||| ||||| ||||| ||
 Db 20 CTGTCACTGACTCTCTCTTG 1

RESULT 1920

ADC65807
 ID ADC65807 standard; DNA; 20 BP.

AC ADC65807;

XX 18-DEC-2003 (first entry)

XX Mouse TGF-beta receptor II targeted antisense oligonucleotide #6.

XX mouse; antisense oligonucleotide;
 KW transforming growth factor beta receptor II; TGF-beta receptor II;
 KW hyperproliferative disorder; breast cancer; autoimmune disorder;
 KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;
 KW phosphorothioate backbone; ss; murine.

OS Mus musculus.

XX WO2003000656-A2.

XX 03-JAN-2003.

XX 19-JUN-2002; 2002WO-US019665.

XX 21-JUN-2001; 2001US-00888361.

XX (ISIS-) ISIS PHARM INC.

XX Murray SF, Wyatt JR;

XX WPI; 2003-175279/17.

XX New compound having a sequence targeted to a nucleic acid encoding
 PT Transforming growth factor beta-receptor II, useful for preparing a
 PT composition for treating hyperproliferative disorder e.g., lung, liver,
 PT colon or gastric cancer.

XX Claim 3; SEQ ID NO 103; 141bp; English.

XX The invention comprises antisense oligonucleotides that are targeted to
 CC the nucleic acid encoding transforming growth factor beta (TGF-beta)
 CC receptor II. The antisense oligonucleotides of the invention are useful

CC for treating: hyperproliferative disorders (e.g. breast cancer), or an
 CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence
 CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a
 CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.
 XX
 SQ Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 108 GCCCCGCGCGATCGCCATGG 127
 ||||| ||||| ||||| ||
 Db 1 GCCCCGTCGCTCGTCATAG 20

RESULT 1921

ADC10516/c
 ID ADC10516 standard; DNA; 20 BP.

XX AC ADC10516;

XX 18-DEC-2003 (first entry)

XX Human NOVX polypeptide gene forward primer SEQ ID NO: 535.

XX ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective;
 KW neuroprotective; antiinflammatory; gene therapy; antisense therapy;
 KW thymimetic; NOVX; pathology; cancer; diabetes; obesity;
 KW endocrine disorder; CNS disorder; inflammatory disorder;
 KW chromosome mapping; tissue typing; predictive medicine.

XX Homo sapiens.

XX WO2003000842-A2.

XX 03-JAN-2003.

XX 04-JUN-2002; 2002WO-US017443.

XX 04-JUN-2001; 2001US-0295607P.

XX 06-JUN-2001; 2001US-0296404P.

XX 07-JUN-2001; 2001US-0296418P.

XX 11-JUN-2001; 2001US-0296575P.

XX 12-JUN-2001; 2001US-0297414P.

XX 12-JUN-2001; 2001US-0295573P.

XX 14-JUN-2001; 2001US-0297567P.

XX 15-JUN-2001; 2001US-0298285P.

XX 18-JUN-2001; 2001US-0299133P.

XX 19-JUN-2001; 2001US-0299230P.

XX 21-JUN-2001; 2001US-029949P.

XX 22-JUN-2001; 2001US-0300177P.

XX 26-JUN-2001; 2001US-0300883P.

XX 28-JUN-2001; 2001US-0301530P.

XX 03-JUL-2001; 2001US-0301550P.

XX 31-JUL-2001; 2001US-030890P.

XX 14-SEP-2001; 2001US-0322297P.

XX 25-SEP-2001; 2001US-0324659P.

XX 03-DEC-2001; 2001US-0337477P.

XX 14-DEC-2001; 2001US-0341562P.

XX 21-FEB-2002; 2002US-0358656P.

XX 21-FEB-2002; 2002US-0359122P.

XX 22-FEB-2002; 2002US-0358378P.

XX 22-FEB-2002; 2002US-0359034P.

XX 22-FEB-2002; 2002US-0359035P.

XX 22-FEB-2002; 2002US-0359121P.

XX 27-FEB-2002; 2002US-0359964P.

XX 01-MAR-2002; 2002US-0360858P.

XX 12-MAR-2002; 2002US-0363430P.

XX 12-MAR-2002; 2002US-0363676P.

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PR 10-APR-2002; 2002US-0371346P.
PR 10-MAY-2002; 2002US-0379444P.
PR 04-JUN-2002; 2002US-00379444.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton B;
PI Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
PI Gerlach VL, Gorman L, Guo X, Herrmann JL, Hjalt T, Ji W, Kekuda R;
PI Khramtsov NV, Li L, Liu X, Malvankar UM, Miller CE, Millet I;
PI Ort T, Padigaru M, Patturajan M, Pena CE, Rastelli L, Rieger DK;
PI Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;
PI Spytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
PI Burgess CE, Lepley DM;
XX
XX WPI; 2003-210149/20.
XX
XX New isolated NOVX polypeptides and nucleic acid molecules useful for
PT treating, preventing and diagnosing pathological conditions with NOVX-
PT associated disorders, such as cancer, obesity, diabetes and inflammatory
PT or CNS diseases.
XX
XX Example B; SEQ ID NO 535; 772pp; English.
XX
XX The invention relates to novel isolated polypeptides, mature form of the
CC polypeptide, a sequence that is 95% identical to the polypeptide or the
CC polypeptide comprising one or more conservative substitutions. The NOVX
CC polypeptide is useful for treating or preventing a pathology associated
CC with the polypeptide e.g. disorders associated with aberrant expression
CC or activity of the polypeptide, such as cancer, diabetes, obesity, and
CC endocrine, CNS and inflammatory disorders. They can also be used in
CC various detection and screening assays, chromosome mapping, tissue typing
CC and predictive medicine. This sequence corresponds to a primer used to
CC amplify and isolate the coding sequence for one of the polypeptides of
CC the invention.
XX
XX Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1022 TCAAGCTGGCTGACTTGGC 1041
Db 20 TGAAGATTGCTGACTTCGC 1

RESULT 1922
ADC38989/c
ID ADC38989 standard; DNA; 20 BP.
XX
XX ADC38989;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human ICAM-1 targeted primer #15.
XX
XX ss; primer; immunosuppressive; antisense therapy;
XX corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1;
XX extracellular adhesion molecule-1; ELAM-1;
XX vascular cell adhesion molecule-1; VCAM-1; corneal explant.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX misc_difference 1..20
FT /tag= a
FT /note= "all internucleotide linkages are phosphodiester
FT bonds"
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT

/note= "OTHER = all A, C and U are 2'-fluoro bases or 2'-
O-methyl"
WO2003032920-A2.
24-APR-2003.
16-OCT-2002; 2002WO-US033236.
18-OCT-2001; 2001US-00982262.
(ISIS-) ISIS PHARM INC.
Bennett CF, Mirabelli CK;
WPI; 2003-403142/38.
Inhibiting corneal allograft rejection, by contacting an allograft with a
formulation having an oligonucleotide targeted to intercellular adhesion
molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion
molecule-1.
Example 5; SEQ ID NO 15; 106pp; English.
The invention relates to a method of inhibiting corneal allograft
rejection, by contacting the allograft with a topical formulation
comprising an antisense oligonucleotide targeted to intercellular
adhesion molecule-1 (ICAM-1), extracellular adhesion molecule-1 (ELAM-1)
or vascular cell adhesion molecule-1 (VCAM-1). The oligonucleotide is
useful for inhibiting corneal allograft rejection or for preserving a
corneal explant ex vivo, where the explant is human. This sequence
corresponds to one of the oligonucleotide of the invention.
Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGGTGGTGGTGGCGG 245
Db 20 GAGAGGGGAAGTGGTGGCGG 1

RESULT 1923
AAD58980/c
ID AAD58980 standard; DNA; 20 BP.
XX
XX AAD58980;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human ICAM-1 antisense oligo, ISIS 1939.
XX
XX Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
XX cellular proliferation; intracellular adhesion molecule; ICAM-1;
XX phosphorothioate backbone; antisense; human; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT
US2003040497-A1.
27-FEB-2003.
21-DEC-2001; 2001US-00029598.

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PR 01-JUL-1997; 97US-00868829.
PR 01-JUL-1998; 98US-00108673.
PR 20-MAY-1999; 99US-00315298.
XX
XX (TENG/) TENG C.
PA (COOK/) COOK P. D.
PA (TILL/) TILLMAN L.
PA (HARD/) HARDEE G. B.
PA (ECKE/) ECKER D. J.
PA (MANO/) MANOHARAN M.
XX
PI Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX WPI; 2003-596370/56.
XX
XX Formulation, useful for treating inflammatory bowel disorder, e.g.
PT ulcerative colitis or Crohn's disease, comprises oligonucleotide for
PT rectal delivery.
XX
XX Example 2; Page 7; 45pp; English.
XX
XX The invention relates to formulations and methods which enhance the local
CC and systemic uptake and delivery of oligonucleotides and nucleic acids
CC via non-parental routes of administration. The formulation is used for
CC treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
CC disease or inflammatory bowel disease, in animals (e.g. human). It can
CC also be used for treating undue cellular proliferation. The present
CC sequence is an antisense oligonucleotide targeted to human intracellular
CC adhesion molecule (ICAM-1) gene. This sequence is used to illustrate the
CC method of the invention
XX
XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 226 GAGAGTGTGTGTGTGGCGG 245
DB 20 GAGAGGGGGAAGTGTGTGGGG 1
RESULT 1924
AAD59446
ID AAD59446 standard; DNA; 20 BP.
XX
AC AAD59446;
XX
XX 18-DEC-2003 (first entry)
XX
XX AS-ipfk-2 (A) antisense phosphorothioate oligonucleotide.
XX
XX Cytostatic; immunomodulator; phosphofructokinase isozyme; ipfk; cancer;
XX inflammation; cachexia; enzyme linked immunosorbant assay; ELISA;
XX therapy; phosphorothioate; antisense; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX
XX US6596851-B1.
XX
XX 22-JUL-2003.
XX
XX 25-SEP-2000; 2000US-00670216.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
XX phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
XX inflammation or cachexia.
XX
XX Example 3; Col 10; 31pp; English.

```

```

PA (PICO-) PICOWER INST MEDICAL RES.
XX
PI Bucala RJ, Chesney JA, Mitchell RA;
XX
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
XX phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
XX inflammation or cachexia.
XX
XX Example 3; Col 10; 31pp; English.
XX
XX The present invention relates to an isolated antibody that binds to an
XX epitope of an inducible human phosphofructokinase-2 (ipfk-2) isozyme. The
XX antibody is useful for treating cancer, inflammation and cachexia. The
XX antibody can also be used in enzyme linked immunosorbant assay (ELISA)
XX immunological assays. The present sequence is AS-ipfk-2 antisense
XX phosphorothioate oligonucleotide
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1679 CCAACTACATCTTCCCTGCT 1698
DB 1 CCAACGGCATCTTCGGGCT 20
RESULT 1925
AAD59445/c
ID AAD59445 standard; DNA; 20 BP.
XX
AC AAD59445;
XX
XX 18-DEC-2003 (first entry)
XX
XX S-ipfk-2 (A) sense phosphorothioate oligonucleotide.
XX
XX Cytostatic; immunomodulator; phosphofructokinase isozyme; ipfk; cancer;
XX inflammation; cachexia; enzyme linked immunosorbant assay; ELISA;
XX therapy; phosphorothioate; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX
XX US6596851-B1.
XX
XX 22-JUL-2003.
XX
XX 25-SEP-2000; 2000US-00670216.
XX
XX 31-OCT-1997; 97US-00961578.
XX
XX 30-OCT-1998; 98US-00183846.
XX
XX (PICO-) PICOWER INST MEDICAL RES.
XX
XX Bucala RJ, Chesney JA, Mitchell RA;
XX WPI; 2003-743054/70.
XX
XX New antibody that binds to an epitope of an inducible human
XX phosphofructokinase-2 isozyme, useful for diagnosing or treating cancer,
XX inflammation or cachexia.
XX
XX Example 3; Col 10; 31pp; English.

```

CC The present invention relates to an isolated antibody that binds to an
CC epitope of an inducible human phosphofructokinase-2 (iPFK-2) isozyme. The
CC antibody is useful for treating cancer, inflammation and cachexia. The
CC antibody can also be used in enzyme linked immunosorbant assay (ELISA)
CC immunological assays. The present sequence is S-IPFK-2 sense
CC phosphorothioate oligonucleotide

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1679 CCAACTACATCTCTCTGCT 1698

Db 20 CCAAGGCATCTTCGGGCT 1

RESULT 1926

ADD22540

ID ADD22540 standard; DNA; 20 BP.

AC ADD22540;

XX 15-JAN-2004 (first entry)

DT Flatfish rhabdovirus oligo #31.

XX DNA vaccine; flatfish rhabdovirus; HIRRV; fish; immunity;

XX transcriptional-control; cytomegalovirus immediate-type promoter;

XX immunogenic; virucide; gene gun; ss; primer.

XX Hirame rhabdovirus.

OS JP2003155254-A.

XX 27-MAY-2003.

XX 26-SEP-2001; 2001JP-00294473.

XX 06-SEP-2001; 2001JP-00271068.

PR 10-SEP-2001; 2001JP-00274202.

XX (MEIJ) MEIJI SEIKA KAISHA LTD.

PA (AOKI/) AOKI H.

XX WPI; 2003-818526/77.

XX DNA vaccine for flatfish rhabdovirus infected fishes has DNA construct

PT comprising a transcriptional control sequence coupled to a nucleotide

PT sequence encoding an immunogenic protein of flatfish rhabdovirus.

XX Example 6; Fig 5; 13pp; Japanese.

XX The invention relates to a novel DNA vaccine for flatfish rhabdovirus

CC (HIRRV) infected fishes, which provides immunity against HIRRV. The

CC vaccination method uses a DNA construct comprising a transcriptional-

CC control sequence containing cytomegalovirus immediate-type promoter,

CC operably coupled to a nucleotide sequence encoding an immunogenic

CC polypeptide of HIRRV. The DNA vaccine has virucide activity. The HIRRV

CC DNA vaccine is useful for administering to a fish belonging to the

CC flatfish family by gene gun. The HIRRV DNA vaccine is useful for inducing

CC immune response in fish infected by HIRRV and is also useful for

CC preventing HIRRV infection in flatfish. The HIRRV DNA vaccine is

CC effective in enhancing immunity of fish infected by HIRRV. This

CC polynucleotide sequence represents an oligo used in the analysis of the

CC mRNA expression level from the muscles of flatfish, following an

CC inoculation with the flatfish rhabdovirus vaccine of the invention.

XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1561 TCGATGCTGCTACTCAGGACG 1580

Db 1 TCGATGCTGCTCAGAAAG 20

RESULT 1927

ADD68463

ID ADD68463 standard; DNA; 20 BP.

AC ADD68463;

XX 15-JAN-2004 (first entry)

DT SNP typing-related PCR primer - SEQ ID 20.

DE single nucleotide polymorphism; SNP; typing; PCR; primer; ss.

XX Unidentified.

OS JP2002300894-A.

XX 15-OCT-2002.

XX 29-JAN-2002; 2002JP-00019752.

XX 01-FEB-2001; 2001JP-00025700.

XX (RIKA) RIKAGAKU KENKYUSHO.

XX WPI; 2003-397221/38.

XX A typing method for single nucleotide polymorphism (SNP) of several

PT hundred thousands of SNP sites with comparatively a small amount of

PT genome DNA.

XX Example 2; SEQ ID NO 20; 45pp; Japanese.

XX The invention relates to a novel method for typing a single nucleotide

CC polymorphism (SNP) using a small amount of genomic DNA comprising

CC simultaneous amplification of plural base sequences containing one or

CC more SNP sites and differentiation of the bases within the SNP sites. The

CC method of the invention may be useful for typing several hundred thousand

CC SNP sites using only a comparatively small amount of genomic DNA. The

CC current sequence is that of the SNP typing-related PCR primer of the

CC invention.

XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 765 GCTCAGGACCTCAACACG 784

Db 1 GCTCAGGACCTCGAGACG 20

RESULT 1928

ADF18650

ID ADF18650 standard; DNA; 20 BP.

AC ADF18650;

XX 12-FEB-2004 (first entry)

DT Mouse X-box binding potential XBp1 specific primer mXbpl-354.

DE Mouse; X-box binding potential; XBp1; neuroprotective; nootropic;

XX respiratory; immunosuppressive; neuroprotective; mydratiatic;

XX antiinflammatory; dermatological; antiarthritic;

XX unfolded protein response; PCR; primer; ss.


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XX OS Mus sp.
XX PN WO2003089622-A2.
XX XX
XX PD 30-OCT-2003.
XX PF 22-APR-2003; 2003WO-US012640.
XX PR 22-APR-2002; 2002US-0375098P.
XX PR 23-APR-2002; 2002US-0374880P.
XX XX
XX PA (UNMI ) UNIV MICHIGAN.
XX PI Kaufman RJ, Kyungo L, Kazutoshi M;
XX XX WPI; 2003-845532/78.
XX DR
XX XX
XX PT New nucleic acid molecule modulating unfolded protein response, useful
XX PT for diagnosing or treating protein conformational disorders, such as
XX PT cystic fibrosis, alpha-antitrypsin deficiency, multiple sclerosis, lupus
XX PT and arthritis.
XX XX
XX PS Example 2; SEQ ID NO 5; 126pp; English.
XX CC
XX CC The present sequence is that of PCR primer mxbp1-354, which is specific
XX CC to mouse X-box binding potential (mxbp1). It was used with primers mxbp1-
XX CC 804-AS ADF18651 and mxbp1-1150-R1 ADF18652 in an RT-PCR analysis of RNA
XX CC isolated from tunicamycin-treated wild-type and IRE1-alpha-null murine
XX CC embryonic fibroblasts. The primers were designed to amplify the region
XX CC encompassing the overlap between ORF1 and ORF2. The PCR demonstrated that
XX CC Xbp1 mRNA splicing is induced by endoplasmic reticulum (ER) stress and
XX CC requires IRE1-alpha. Spliced XBP1 mRNA ADF18646 can activate the unfolded
XX CC protein response (UPR) to treat protein conformational diseases and
XX CC disorders. Diagnostic targets and therapeutic agents to enhance protein
XX CC folding capabilities and limit the folding load on the ER are provided.
XX CC Methods and compositions are provided for the treatment and diagnosis of
XX CC protein conformational diseases or disorders, including alphas-
XX CC antitrypsin deficiency, cystic fibrosis, and autoimmune diseases and
XX CC disorders such as multiple sclerosis, muscular dystrophy, lupus and
XX CC arthritis. Also provided are methods for modulating the UPR by modulating
XX CC XBP1 mRNA splicing.
XX SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 834 CCTGTCTTTTGAGTACTCG 853
Db 1 CCTGTGTTGAGAACCCAGG 20

RESULT 1929
ADFL1610/c
ID ADFL1610 standard; DNA; 20 BP.
XX XX
XX AC ADFL1610;
XX XX
XX DT 12-FEB-2004 (first entry)
XX XX
XX DE Bovine pregnancy associated glycoprotein primer #6.
XX XX
XX KW pregnancy; bovine; pregnancy associated glycoprotein; BoPAG;
XX KW progesterone; animal breeding; primer; ss.
XX XX
XX OS Synthetic.
XX XX
XX PN WO2003043524-A2.
XX XX
XX PD 30-MAY-2003.
XX XX

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PF 20-NOV-2002; 2002WO-US037236.
XX XX
XX PR 20-NOV-2001; 2001US-0331822P.
XX XX
XX PA (UMOR ) UNIV MISSOURI.
XX PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX PI Lucy MC, Mathialagan N;
XX XX WPI; 2003-482384/45.
XX DR
XX XX Early pregnancy detection in animals comprises obtaining a sample from
XX PT the animal and measuring the levels of progesterone and bovine pregnancy
XX PT associated glycoprotein in the sample.
XX XX
XX PS Disclosure; SEQ ID NO 21; 102pp; English.
XX XX
XX CC The invention relates to the early detection of pregnancy in a bovine
XX CC animal by obtaining a sample from the bovine animal, measuring the level
XX CC of at least one bovine pregnancy associated glycoprotein (BoPAG) in the
XX CC sample, and measuring the level of progesterone in the sample, where
XX CC elevated levels of BoPAG and progesterone indicate that the bovine animal
XX CC is pregnant. The method is useful in accurate early stage pregnancy
XX CC detection in animals and in increasing the efficiency of commercial
XX CC animal breeding programs. This sequence corresponds to a BoPAG-associated
XX CC PCR primer.
XX SQ Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 667 GGC AAAAGCAAGCTCAGACA 686
Db 20 GGC AAAAGCAAGCTCAGAAA 1

RESULT 1930
ADFO9715/c
ID ADF09715 standard; DNA; 20 BP.
XX XX
XX AC ADF09715;
XX XX
XX DT 12-FEB-2004 (first entry)
XX XX
XX DE Human c-raf kinase antisense oligonucleotide seq id 11.
XX XX
XX KW tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
XX KW antiarteriosclerotic; antisense-therapy; hyperproliferative disorder;
XX KW atherosclerosis; tumour; c-raf kinase; antisense oligonucleotide; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US2003119769-A1.
XX XX
XX PD 26-JUN-2003.
XX XX
XX PF 14-JUN-2002; 2002US-00173225.
XX XX
XX PR 31-MAY-1994; 94US-00250856.
XX PR 31-MAY-1995; 95WO-US007111.
XX PR 26-NOV-1996; 96US-00756806.
XX PR 07-JUL-1997; 97US-00888982.
XX PR 06-JUL-1998; 98WO-US013961.
XX PR 28-AUG-1998; 98US-00143214.
XX PR 18-FEB-2000; 2000US-00506073.
XX PR 25-JAN-2002; 2002US-00057550.
XX XX
XX PA (MONI/) MONIA B P.
XX XX
XX PI Monia BP;
XX XX

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DR WPI; 2003-863446/80.
 XX Preventing and/or treating conditions associated with raf expression,
 PT such as hyperproliferative disorders, atherosclerosis and tumors, using
 PT antisense oligonucleotide modulation of human raf gene expression.
 XX Disclosure; SEQ ID NO 11; 41pp; English.
 XX The invention describes a method of preventing or treating tumour
 CC metastasis in an animal comprising administering to the animal an
 CC oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA
 CC encoding human raf and capable of inhibiting raf expression. Also
 CC disclosed are raf oligonucleotides, nucleic acids, proteins and
 CC compositions used in the methods of the invention. The oligonucleotides
 CC have cytostatic and antiarteriosclerotic properties, are useful as raf-
 CC inhibitors and in antisense-therapy. The methods and compositions of the
 CC present invention are useful for preventing and/or treating conditions
 CC associated with raf expression, such as hyperproliferative disorders,
 CC atherosclerosis and tumours. This sequence represents a human c-raf
 CC kinase antisense oligonucleotide.
 XX
 XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1186 ATGGCCACAGCGCGTCCCT 1205
 DB 20 ATGGCTCCAGGCTTCACCT 1
 ||||| ||||| ||||| |||||
 RESULT 1931
 ADF08240/c
 ID ADF08240 standard; DNA; 20 BP.
 XX
 AC ADF08240;
 XX
 XX 12-FEB-2004 (first entry)
 XX
 DE APOAV PCR primer #2.
 XX
 XX ss; PCR; primer: human; apolipoprotein A-V; APOAV; triglyceride;
 KW lipid-related; diabetic disease; cardiovascular disease;
 KW plasma triglyceride; diabete; obesity; metabolic disease; gene therapy;
 KW single nucleotide polymorphism; apoA5.
 XX
 OS Homo sapiens..
 XX
 XX US2003150003-A1.
 XX
 XX 07-AUG-2003.
 XX
 XX 27-AUG-2002; 2002US-00229834.
 XX
 XX 07-SEP-2001; 2001US-0318219P.
 XX
 XX (RUBI/) RUBIN E.
 XX (PENN/) PENNACCHIO L A.
 XX
 XX Rubin E, Pennacchio LA;
 XX
 XX WPI; 2003-897618/82.
 XX
 XX New human apolipoprotein A-V (APOAV) polynucleotides and polypeptides,
 PT useful for identifying or screening of drugs that treat lipid-related or
 PT diabetic diseases, for lowering plasma triglycerides, or in gene therapy.
 XX
 XX Disclosure; SEQ ID NO 23; 192pp; English.
 XX
 XX The invention relates to an isolated polynucleotide homologous to the
 CC cDNA apolipoprotein A-V (APOAV) sequence. The human apolipoprotein A-V
 CC (APOAV) gene, polynucleotides and polypeptides are useful for determining

CC predisposition towards elevated triglyceride levels, for identifying or
 CC screening of drugs that treat lipid-related or diabetic diseases, or in
 CC genetic analysis of cardiovascular diseases. The APOAV polypeptide is
 CC useful for lowering plasma triglycerides or treating diabetes, obesity or
 CC other metabolic diseases. The APOAV gene and vector are useful in gene
 CC therapy. The single nucleotide polymorphisms are useful for determining
 CC the genetic status of individuals or for studying individual risk
 CC factors. The transgenic non-human animals are useful for further animal
 CC studies of human or mouse apoA5. The present sequence represents an APOAV
 CC PCR primer.
 XX
 XX Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 622 AAGCTGGACAACTGGCGGA 641
 DB 20 AACCTGGACCAGCTGGCGGA 1
 ||||| ||||| ||||| |||||
 RESULT 1932
 ADG40071
 ID ADG40071 standard; DNA; 20 BP.
 XX
 AC ADG40071;
 XX
 XX 26-FEB-2004 (first entry)
 XX
 DE Viral cDNA PCR primer #5.
 XX
 XX ss; small interfering RNA; siRNA; pathogen; double-stranded RNA; dsRNA;
 KW RNA interference; viral; bacterial; fungal; parasitic infection;
 KW gene therapy; PCR; primer.
 XX
 OS Rous sarcoma virus.
 XX
 XX US2003203868-A1.
 XX
 XX 30-OCT-2003.
 XX
 XX 06-FEB-2003; 2003US-00361161.
 XX
 XX 06-FEB-2002; 2002US-0354684P.
 XX
 XX (BUSH/) BUSHMAN F D.
 XX (HUW/) HU W.
 XX
 XX Bushman FD, Hu W;
 XX
 XX WPI; 2003-864723/80.
 XX
 XX Inhibiting the growth of a pathogen by contacting the pathogen with a
 XX double-stranded RNA (dsRNA) that corresponds to a target gene essential
 XX to growth of the pathogen and incubating the dsRNA and the pathogen for
 XX RNA interference.
 XX
 XX Example 12; SEQ ID NO 26; 39pp; English.
 XX
 XX Inhibiting the growth of a pathogen comprises contacting the pathogen
 XX with a double-stranded RNA (dsRNA) molecule that corresponds to a target
 XX gene essential to growth of the pathogen and incubating the dsRNA
 XX molecule and the pathogen under conditions suitable for RNA interference.
 XX INDEPENDENT CLAIMS are also included for: a composition comprising dsRNA
 XX that corresponds to a target gene of the HIV genome; a method of
 XX identifying a gene sequence that is a target for RNA interference aimed
 XX at inhibiting the growth of a pathogen; a method of treating a pathogenic
 XX condition in a host organism; and a method of making a transgenic
 XX organism capable of expressing a dsRNA that corresponds to a target gene
 XX in a pathogen. Preferred Method: In the method of inhibiting the growth
 XX of a pathogen, the pathogen is contained in a cell or contacted in vivo .
 XX The pathogen is a retrovirus, which is HIV, or avian leukosis virus,

CC subtype J and Rous Sarcoma Virus. The pathogen causes a disease upon
CC infecting an organism, which is a vertebrate, mammal, bird or chicken.
CC The vertebrate comprises mammals, birds, amphibians, reptiles or fish.
CC The mammal comprises dogs, cats, pigs, cows, sheep, goats, guinea pig,
CC rabbits, rats, mice, chimpanzees or humans. The bird is chicken or
CC turkey. The target gene is a cellular, viral or HIV gene, which is gag,
CC pol or env. The contacting is by microinjection, transfection, viral
CC infection, electroporation or gene gun particle bombardment. The dsRNA is
CC encoded by a viral vector. It comprises a sequence that is a combination
CC of sequences comprising 112 or 211 amino acids. Identifying a gene
CC sequence that is a target for RNA interference aimed at inhibiting the
CC growth of a pathogen comprises: selecting a candidate target gene
CC sequence; contacting a host cell containing a pathogen with dsRNA that
CC corresponds to the target gene sequence; and determining whether the
CC dsRNA inhibits the growth of the pathogen. Treating a pathogenic
CC condition in a host organism comprises: identifying the pathogen causing
CC the condition; determining a suitable target gene sequence for RNA
CC interference; and contacting the organism with a dsRNA sequence that
CC corresponds to the target gene sequence under conditions for RNA
CC interference. The target gene corresponds to a pathogen or host cellular
CC gene. Making a transgenic organism capable of expressing a dsRNA that
CC corresponds to a target gene in a pathogen comprises: identifying a
CC target gene in the pathogen; preparing a nucleic acid sequence having a
CC region that corresponds to a portion of the target gene; where the
CC nucleic acid is able to form a double-stranded transcript once expressed
CC in the organism; contacting a recipient organism with the nucleic acid;
CC producing one or more offspring of the recipient organism; and testing
CC the offspring for expression of the double-stranded transcript. The
CC recipient organism is a pre-implantation mammalian embryo, which is
CC transferred into a pseudo-pregnant female. The method further comprises
CC allowing the embryo to develop into at least one viable transgenic mammal
CC in which the expression of the target gene is inhibited by the presence
CC of the double-stranded target gene transcript. The animal is contacted
CC with primordial germ cells transfected with the nucleic acid. The
CC contacting is effected by microinjection. The nucleic acid is expressed
CC of an inducible promoter. Antibacterial; Fungicide; Antiparasitic;
CC Virucide. No biological data given. RNA interference; Gene therapy. The
CC method is useful in inhibiting the growth of a pathogen for treating
CC viral, bacterial, fungal or parasitic infection (claimed).

XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1360 CCCCGACTTGATAGCGG 1379
Db 1 CCCCGACTTGATAGG 20

RESULT 1933

ADG28985
ID ADG28985 standard; DNA; 20 BP.

XX AC ADG28985;

DT 26-FEB-2004 (first entry)

DE PCR primer SEQ ID 68 used to amplify human Mac2-BP cDNA.

KW recombinant expression construct; cyclin-dependent kinase inhibitor; CDK;
KW virucide; cytostatic; neuroprotective; nontropic; antiarteriosclerotic;
KW antiarthritic; nephrotropic; viral infection; cancer; renal;
KW age-related disease; Alzheimer's; atherosclerosis; arthritis;
KW gene therapy; human; ss; PCR; primer; Mac2-BP.

OS Homo sapiens.

XX WO2003073062-A2.

PD 04-SEP-2003.

XX

PF 29-AUG-2002; 2002WO-US027584.

XX 29-AUG-2001; 2001US-0315791P.

PR (UNII) UNIV ILLINOIS FOUND.

XX Roninson IB, Poole J;

PI WPI; 2003-731624/69.

XX New recombinant expression construct for identifying and modulating

PT expression of genes regulated by cyclin-dependent kinase inhibitors, such

PT as genes involved in viral infection, cancer, renal diseases or age-

PT related diseases.

XX Example 11; SEQ ID NO 68; 143pp; English.

XX The invention relates to a novel recombinant expression construct

CC encoding a reporter gene operably linked to a promoter from a mammalian

CC viral or cellular gene induced by a cyclin-dependent kinase (CDK)

CC inhibitor. The construct of the invention demonstrates virucide,

CC cytostatic, neuroprotective, nontropic, antiarteriosclerotic,

CC antiarthritic and nephrotropic activities and may be useful in

CC identifying compounds that inhibit the induction of genes involved in

CC viral infection, cancer, renal diseases or age-related diseases including

CC Alzheimer's disease, atherosclerosis or arthritis, such genes being

CC induced by cyclin-dependent kinase inhibitors. Furthermore, The construct

CC may have gene therapy applications. The current sequence is that of the

CC PCR primer which was used in the exemplification of the invention.

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 48 ACCAGCAGTGAGTGCTGA 67

Db 1 ACCATGAGTGTGATGCTGA 20

RESULT 1934

ADG28985

ID ADF88118 standard; DNA; 20 BP.

XX ADF88118;

AC ADF88118;

DT 26-FEB-2004 (first entry)

DE Single nucleotide polymorphism detection primer, SEQ ID No 1701.

XX human; single nucleotide polymorphism; microarray; side effect; ss;

XX primer; PCR.

XX Synthetic.

OS Homo sapiens.

XX JP2003235571-A.

XX 26-AUG-2003.

XX 12-FEB-2002; 2002JP-00034717.

XX 12-FEB-2002; 2002JP-00034717.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms

PT in human gene.

XX Claim 2; SEQ ID NO 1701; 704pp; Japanese.

PS

Tue Nov 2 13:39:09 2004

XX The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

XX Sequence 20 BP; 4 A; 1 C; 10 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGCGGCGAG 248
 ||||| ||||| ||||| |||||
 Db 1 AGTGGTGGTGGCGGCGTG 20

RESULT 1935
 ADF88279/C
 ID ADF88279 standard; DNA; 20 BP.
 XX
 AC ADF88279;
 XX
 DT 26-FEB-2004 (first entry)
 DE Single nucleotide polymorphism detection primer, SEQ ID NO 1862.
 XX human; single nucleotide polymorphism; microarray; side effect; ss;
 KW primer; PCR.
 XX Synthetic.
 OS Homo sapiens.
 XX JP2003235571-A.
 XX
 XX 26-AUG-2003.
 XX
 PF 12-FEB-2002; 2002JP-00034717.
 XX
 PR 12-FEB-2002; 2002JP-00034717.
 XX
 PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 XX
 XX WPI; 2003-820454/77.
 XX
 PT Novel polynucleotide useful for detecting single nucleotide polymorphisms
 in human gene.
 XX
 PS Claim 2; SEQ ID NO 1862; 704pp; Japanese.
 XX
 CC The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide

CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 245 CGAGTGACCTCGAGAGGCC 264
 ||||| ||||| ||||| |||||
 Db 20 GCTCTGACACTGGAGATGCC 1

RESULT 1936
 ADF91007/C
 ID ADF91007 standard; DNA; 20 BP.
 XX
 AC ADF91007;
 XX
 DT 26-FEB-2004 (first entry)
 DE Microorganism detection PCR primer, SEQ ID NO 90.
 XX Detection; microorganism; PCR; primer; bacterium; fungus; protozoan;
 KW virus; diarrhoea; food poisoning; ss.
 XX Staphylococcus aureus.
 OS
 XX JP2003164282-A.
 XX
 PD 10-JUN-2003.
 XX
 PF 29-NOV-2001; 2001JP-00365153.
 XX
 PR 29-NOV-2001; 2001JP-00365153.
 XX
 XX (RAKA-) RAKAN KK.
 PA (GIFU-) GIFU DAIGAKUCHO.
 XX
 XX WPI; 2003-793230/75.
 XX
 PT Rapid, sensitive detection of specific or unspecified microbes causing
 PT diarrhoea and food poisoning, using primers which target universal and
 PT specific genes, and amplifying by PCR under heat cycle conditions
 PT suitable for many detections.
 XX
 XX Disclosure; SEQ ID NO 90; 69pp; Japanese.
 XX
 CC The present invention relates to a method for detecting microorganisms
 CC using primers (ADF90918-ADF91145). The method is used for detecting
 CC microorganisms (bacteria, fungi, protozoa, viruses) which cause diarrhoea
 CC symptoms, and pathogenic microbe of food poisoning. The method can be
 CC used to detect unspecified microbes, or specific pathogens, or for the
 CC simultaneous detection of many kinds of microorganism.
 XX
 XX Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 755 AAGTGTCCCTGCTCAAGGAC 774
 ||||| ||||| ||||| |||||
 Db 20 AAGTGTAACTCAAGTCAAGAAC 1

RESULT 1937
 ADH94130/C
 ID ADH94130 standard; DNA; 20 BP.
 XX
 AC ADH94130;

XX 22-APR-2004 (first entry)
 XX Human gene PCR primer #975.
 XX
 XX human; gene sequence; single nucleotide polymorphism; SNP;
 XX disease diagnosis; ss; PCR; primer.
 XX Homo sapiens.
 OS
 XX JP2003174893-A.
 PN
 XX 24-JUN-2003.
 PD
 XX 11-DEC-2001; 2001JP-00377637.
 PF
 XX 11-DEC-2001; 2001JP-00377637.
 PR
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA
 XX WPI; 2003-819215/77.
 DR
 XX
 XX Polynucleotide for detecting single nucleotide polymorphisms existing in
 PT human gene, contains isolated human gene having specified sequence.
 PT human gene, contains isolated human gene having specified sequence.
 XX
 XX Claim 2; SEQ ID NO 1967; 529pp; Japanese.
 PS
 XX The invention comprises isolated human gene sequences and PCR primer
 CC sequences which can be used to detect single nucleotide polymorphisms
 CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs
 CC existing in human genes and for the diagnosis of human disease. The
 CC present DNA sequence represents a human gene PCR primer of the invention.
 CC
 XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1282 CCAGGCATCCGTCCACGA 1301
 Db 20 CCAGGCATCCGTCCACGA 1
 RESULT 1938
 ADI00246
 ID ADI00246 standard; DNA; 20 BP.
 AC
 XX ADI00246;
 AC
 XX 22-APR-2004 (first entry)
 DT
 XX PCR primer SEQ ID 26 used to amplify human PKD-1 exon 46A DNA.
 DE
 XX mutation analysis; PKD; polycystic kidney disease; human; PKD-1; ss; PCR;
 XX primer.
 KW
 XX Homo sapiens.
 OS
 XX US2003152936-A1.
 PN
 XX 14-AUG-2003.
 PD
 XX 26-FEB-2002; 2002US-00083246.
 PF
 XX 12-OCT-2001; 2001US-0328739P.
 PR
 XX (ATHE-) ATHENA DIAGNOSTICS INC.
 PA
 XX Jones JG, Hennigan AN, Curran JA, Allen SK, Robichaud NJ, Wang J;
 PI Flynn KE, Garces JA, Palatucci CM;
 PI
 XX WPI; 2003-897708/82.
 DR

XX Analyzing mutations of a target nucleic acid by detecting heteroduplexes
 PT from generated duplexes, useful for diagnosing patients affected with
 PT polycystic kidney disease.
 XX
 XX Claim 3; SEQ ID NO 26; 126pp; English.
 PS
 XX The invention relates to a novel method of mutation analysis of a target
 CC nucleic acid which comprises incubating a sample having the target
 CC nucleic acid in a reaction mixture, in the presence of at least one first
 CC and second nucleic acid, where incubation produces amplified products,
 CC generating duplexes in the amplified products and detecting the presence
 CC or absence of a heteroduplex from the duplexes, where its presence
 CC indicates a potential mutation in the target nucleic acid and its absence
 CC indicates the absence of mutation in the target nucleic acid. The method
 CC and compositions of the invention may be useful for analysing mutation
 CC and diagnosing patients affected with PKD (polycystic kidney disease).
 CC The current sequence is that of a PCR primer of the invention which was
 CC used to amplify human polycystic kidney disease PKD-1 DNA.
 XX
 XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 623 AGCTGGACAAACTGGCGAG 642
 Db 1 AGCTGGTCAAACTGGGTGAG 20
 RESULT 1939
 AAD53075
 ID AAD53075 standard; DNA; 20 BP.
 XX
 XX AAD53075;
 AC
 XX 14-MAY-2003 (first entry)
 DT
 XX BAGE marker gene specific sense RT-PCR primer.
 DE
 XX Beta 1, 4-N-acetylgalactosaminyltransferase; GD2 synthase; GM2; RT-PCR;
 KW reverse transcriptase PCR; medullablastoma; astrocytoma; retinoblastoma;
 KW cancer; neuroblastoma; melanoma; lymphoma; carcinoma; sarcoma; tumour;
 KW primer; BAGE; ss.
 XX
 XX Unidentified.
 OS
 XX WO200292767-A2.
 PN
 XX 21-NOV-2002.
 PD
 XX 19-APR-2002; 2002WO-US015037.
 PF
 XX 11-MAY-2001; 2001US-0290527P.
 PR
 XX (SLOK) SLOAN KETTERING INST CANCER RES.
 PA
 XX Cheung IV, Cheung NV;
 PI
 XX WPI; 2003-129279/12.
 DR
 XX Measuring GD2 synthase mRNA, useful for detecting or diagnosing cancer,
 PT e.g. neuroblastoma, small cell lung cancer, melanoma, by performing real-
 PT time quantitative RT-PCR on the sample using appropriate primers of GD2
 PT synthase.
 XX
 XX Claim 61; Page 138; 165pp; English.
 PS
 XX The invention relates to a method of measuring beta 1,4-N-
 CC acetylglactosaminyltransferase (GD2/GM3 synthase) mRNA. The method
 CC involves obtaining an mRNA sample, performing real-time quantitative
 CC reverse transcriptase-polymerase chain reaction (RT-PCR) on the sample

CC using appropriate primers of GD2 synthase, and determining the amount of
 CC GD2 mRNA. The methods and kits are useful for detecting and/or diagnosing
 CC various forms of cancer such as neuroblastoma, melanoma, B cell lymphoma,
 CC osteosarcoma, soft tissue sarcoma, medullablastoma, high-grade
 CC astrocytoma, retinoblastoma, Wilm's tumour, Ewing's sarcoma, bladder
 CC carcinoma, lung cancer, breast cancer, pancreatic cancer, oesophageal
 CC cancer, gastrointestinal cancer, sarcoma, head and neck tumours or
 CC melanoma. The present sequence is BAGE marker gene specific RT-PCR
 CC primer, used to illustrate the method of the invention

XX Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGGAGTGA 251

Db 1 GATGGTGGTGGCAACAGAGA 20

RESULT 1940

ABX78206

ID ABX78206 standard; DNA; 20 BP.

XX AC ABX78206;

XX 17-APR-2003 (first entry)

XX Human bifunctional apoptosis regulator antisense oligo ISIS NO 143737.

XX Human; bifunctional apoptosis regulator; antisense; phosphorothioate;
 KW cystostatic; antiinflammatory; inhibitor; infection; inflammation; tumour;
 KW ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate backbone, nucleotides 1-5 and 16
 FT -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7
 FT -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-
 FT methyl cytosines"

XX US6468796-B1.

XX 22-OCT-2002.

XX 27-APR-2001; 2001US-00844525.

XX 27-APR-2001; 2001US-00844525.

XX (ISIS-) ISIS PHARM INC.

XX Watt AT;

XX WPI; 2003-196749/19.

XX New antisense compounds targeted to nucleic acids encoding human
 PT bifunctional apoptosis regulator, for modulating expression of the
 PT regulator and treating diseases associated with expression of the
 PT regulator in humans.

PS Claim 3; Col 45-46; 42pp; English.

XX This invention describes a novel compound, 17-50 nucleobases in length
 CC which specifically hybridises with a nucleic acid encoding human
 CC bifunctional apoptosis regulator (BAR) and inhibits the expression of
 CC human BAR. The products of the invention have cytostatic and
 CC antiinflammatory activity and can be used to inhibit human BAR expression
 CC during antisense therapy, useful for inhibiting the expression of human

CC BAR in cells or tissues and for treating diseases associated with
 CC expression of BAR in an animal, particularly a human suspected of having
 CC or being prone to a disease or condition associated with expression of
 CC human BAR. In addition the antisense oligonucleotides are useful for
 CC diagnostics, therapeutics and as research reagent, e.g. prophylactically
 CC to prevent or delay infection, inflammation or tumor formation. The
 CC oligonucleotides described in the invention have 2'-methoxyethyl (2'-MOE)
 CC wings and a deoxy gap. This sequence represents a human BAR antisense
 CC oligonucleotide described in the disclosure of the invention

XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 195 CAATGGTCCCTGAGCAGA 214

Db 1 CAATGGCATCCCTGAGGAGA 20

RESULT 1941

ABZ90450

ID ABZ90450 standard; DNA; 20 BP.

XX AC ABZ90450;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPFIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 5692; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1034 ACTTGGCCTGCCGAGCC 1053
 ||||| ||||| ||||| |||||
 Db 1 ACTGAGCCAGCCCGAGCC 20

RESULT 1942
 ABZ92603/c
 ID ABZ92603 standard; DNA; 20 BP.

AC ABZ92603;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

XX 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 7845; 872pp; English.

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytotstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 16 GGATGGACAGGAATGCACAG 35
 ||||| ||||| ||||| |||||
 Db 20 GGATGGCCGGGACTGCACAG 1

RESULT 1943

ABZ88825

ID ABZ88825 standard; DNA; 20 BP.

AC ABZ88825;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

XX 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 4067; 872pp; English.

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytotstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1485 CAACCTCTCTGACACTACTT 1504

Db 1 CAACCTCTCTGATTTTAAIT 20

RESULT 1944

ABZ87133/C
 ID ABZ87133 standard; DNA; 20 BP.

XX AC ABZ87133;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Claim 15; SEQ ID NO 2375; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1285 GGCATCTCTGTCCACGAGGA 1304

Db 20 GGCATCCGACCGACGATGA 1

RESULT 1945

ABZ92417

ID ABZ92417 standard; DNA; 20 BP.

XX AC ABZ92417;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 7659; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1052 CCAAGTCAATCCCAACAAAG 1071
 Db 1 CCAGTCACTCCAGCAGAG 20

RESULT 1946

ABZ88076
 ID ABZ88076 standard; DNA; 20 BP.

XX AC ABZ88076;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3318; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 457 GAGGACATCAACAAGCGCCT 476
 Db 1 GAGGAGCTCAACAAGCTGCT 20

RESULT 1947

ABZ88262/c

ID ABZ88262 standard; DNA; 20 BP.

XX AC ABZ88262;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3504; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1020 GCTCAAGCTGGCTGACTTTG 1039

DB 20 GCTAAAGTGGCTGCTTTG 1

RESULT 1948

ABZ84865

ID ABZ84865 standard; DNA; 20 BP.

XX

AC ABZ84865;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX

PS Claim 15; SEQ ID NO 107; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 13.6; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 299 CACGGGGCCCACTCAGCTCT 318

DB 1 CACTGTCCCACTCAGCTCT 20

RESULT 1949

ABZ85601/c

ID ABZ85601 standard; DNA; 20 BP.

XX

AC ABZ85601;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX

PS Claim 15; SEQ ID NO 843; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 763 CTGCTCAAGGACCTCAACA 782
 |||||
 Db 20 CTGCTCAAGGACCAAGCA 1

RESULT 1950
 ABZ86435/c
 ID ABZ86435 standard; DNA; 20 BP.

XX AC ABZ86435;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Claim 15; SEQ ID NO 1677; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1481 TCCACAACCTTCTGACACT 1500
 |||||
 Db 20 TCCAGAAAGCTTAAACACT 1

RESULT 1951

ABZ92850/c

ID ABZ92850 standard; DNA; 20 BP.

XX AC ABZ92850;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 8092; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 4;

QY 657 CGTCTACAAAGGCAAAAGCA 676
Db 20 CTTCTAAAGGTCAAAGCA 1

RESULT 1952
ABZ75967/c
ID ABZ75967 standard; DNA; 20 BP.
AC ABZ75967;
XX
XX 29-MAY-2003 (first entry)
DT
XX ICAM-1 gene targeting 2'-deoxyoligonucleotide ISIS 1939.

DE ICAM-1; desulphurization; antioxidant; intercellular adhesion molecule-1;
XX
XX ICAM-1; desulphurization; antioxidant; intercellular adhesion molecule-1;
KW ss.

XX Synthetic.
OS Homo sapiens.

XX WO2003005822-A1.

XX 23-JAN-2003.

XX 11-JUL-2002; 2002WO-US022038.

XX 11-JUL-2001; 2001US-00902953.

XX (ISIS-) ISIS PHARM INC.

XX Krotz AH, Mehta R;

XX WPI; 2003-229426/22.

XX Preventing desulfurization of oligonucleotide comprising phosphorothioate
XX linkages in bi-phasic/multi-phasic formulation, by adding to formulation
XX an antioxidant that partitions into aqueous phase of the formulation.

XX Disclosure; Page 12; 51pp; English.

XX The invention relates to preventing desulphurization of an
XX oligonucleotide or its bioequivalent comprising one or more
XX phosphorothioate linkages in a bi-phasic or multi-phasic formulation. The
XX method involves including in the formulation an antioxidant which
XX partitions into the aqueous phase of the formulation. The method is
XX useful for increasing the stability of oligonucleotide comprising
XX phosphorothioate linkages. The present sequence represents a 2'-
XX deoxyoligonucleotide having a phosphorothioate backbone and is targeted
XX to the 3' UTR (untranslated region) of ICAM-1 (intercellular adhesion
XX molecule-1)

XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 CAGAGTGGTGGTGGTGGCGG 245
Db 20 CAGAGGGGAAGTGGTGGGGG 1

RESULT 1953
ABZ82717/c
ID ABZ82717 standard; DNA; 20 BP.

XX AC ABZ82717;

XX 14-MAY-2003 (first entry)

XX Human HSL chimeric phosphorothioate oligonucleotide SEQ ID NO:106.

XX Hormone-sensitive lipase; antisense oligonucleotide; inhibitor; obesity;
KW phosphorothioate; antidiabetic; anorectic; cytostatic; antisense therapy;
KW abnormal metabolic condition; hyperlipidaemia; type 2 diabetes; cancer;
KW hyperproliferative disorder; human; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"

FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"

FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"

XX WO2003010139-A2.

XX 06-FEB-2003.

XX 15-JUL-2002; 2002WO-US022672.

XX 26-JUL-2001; 2001US-00915814.

XX (ISIS-) ISIS PHARM INC.

XX Butler MM, Watt AT, Freier SM, Wyatt JR;

XX WPI; 2003-239411/23.

XX New antisense oligonucleotides targeted against nucleic acids encoding
XX hormone-sensitive lipase, useful for treating abnormal metabolic
XX condition, e.g. hyperlipidemia and obesity, or a hyperproliferative
XX disorder, e.g. cancer.

XX Example 15; Page 89; 167pp; English.

XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding a hormone-sensitive lipase
XX (HSL) or a splice variant of HSL. The compound specifically hybridises
XX with and inhibits the expression of HSL or a splice variant of HSL, or
XX specifically hybridises with at least an 8-nucleobase portion of an
XX active site on a nucleic acid molecule encoding HSL. (I) have anorectic,
XX antidiabetic and cytostatic activities, and can be used in antisense
XX therapy. (I) is useful for treating an animal, particularly human,
XX suspected of having an abnormal metabolic condition such as obesity,
XX hyperlipidaemia, type 2 diabetes, a hyperproliferative disorder such as
XX cancer (e.g. pituitary, colorectal, breast, testicular, pulmonary or
XX epithelial cancer). (I) is also useful in modulating blood glucose
XX levels, particularly plasma or serum glucose levels, in a diabetic
XX animal. The present sequence represents a human hormone-sensitive lipase

```
CC chimeric phosphorothioate antisense oligonucleotide, which is used in an
CC example from the present invention
XX
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1003 ATCAACGAGAGGGAGAGCT 1022
   ||||| ||||| ||||| |||||
DB 20 ATCACCAGATGGAAGTCT 1

RESULT 1954
ACC49170/c
ID ACC49170 standard; DNA; 20 BP.
XX
AC ACC49170;
XX
DT 19-JUN-2003 (first entry)
XX
DE ICAM-1 inhibitory antisense oligonucleotide SEQ ID NO:2.
XX
KW Inhibition; phosphorothioate; delayed release oral formulation;
KW enhanced gastrointestinal absorption; ulcerative colitis;
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
KW abnormal cellular proliferation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
XX
PN WO2003017940-A2.
XX
PD 06-MAR-2003.
XX
PF 22-AUG-2002; 2002WO-US026924.
XX
PR 22-AUG-2001; 2001US-00944493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Weinbach SP, Tillman LG, Geary RS, Hardee GE;
XX
DR WPI; 2003-354422/33.
XX
PT Pulsed release oral formulation providing enhanced gastrointestinal
PT absorption, comprises first particles containing drug and penetration
PT enhancer and second particles containing delayed release penetration
PT enhancer.
XX
PS Disclosure; Page 28; 59pp; English.
XX
CC The present invention describes a delayed release oral formulation (A),
CC giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)
CC comprises a first set of particles containing (I) and a penetration
CC enhancer (II) and a second set of particles containing (II) in a delayed
CC release coating or matrix (III). (A) is used for enhancing the absorption
CC of (I) in mammals, especially humans. Typical disorders to be treated
CC include ulcerative colitis, rheumatoid arthritis, Crohn's disease,
CC inflammatory bowel disease and abnormal cellular proliferation. When the
CC particles release (I) and (II) at a first location in the GI tract
CC (generally the intestines), (II) is rapidly absorbed (during a first
CC release pulse) and is often present in insufficient amount to promote
CC absorption of the entire dose of (I). This problem is solved by providing
CC further (II) in delayed release form in the particles, so that absorption
CC of (I) is completed in a second pulse. The present sequence represents an
CC exemplary oligonucleotide from the present invention which inhibits ICAM-
```

```
CC 1
XX
SQ Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 226 GAGAGTGTGTGTGTGTGGCGG 245
   ||||| ||||| ||||| |||||
DB 20 GAGAGGGGAAGTGTGTGGGGG 1

RESULT 1955
ACC62163/c
ID ACC62163 standard; DNA; 20 BP.
XX
AC ACC62163;
XX
DT 20-JUN-2003 (first entry)
XX
DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 52.
XX
KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
KW anorectic; cardiovascular; gene therapy; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
KW glucose; antisense oligonucleotide; ss.
XX
OS Synthetic.
XX
PN WO2003011887-A2.
XX
PD 13-FEB-2003.
XX
PF 30-JUL-2002; 2002WO-US024247.
XX
PR 01-AUG-2001; 2001US-00920033.
PR 30-APR-2002; 2002US-00135985.
PR 15-MAY-2002; 2002US-00147196.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2003-269105/26.
XX
PT New antisense oligonucleotides for modulating apolipoprotein B,
PT especially for preventing or treating atherosclerosis, hyperlipidemia or
PT diabetes, or for modulating glucose, cholesterol, lipoprotein or
PT triglyceride levels.
XX
PS Example 15; Page 96; 160pp; English.
XX
CC The invention relates to a novel compound that is 8-50 nucleotides in
CC length that is targeted to a nucleic acid molecule encoding
CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits
CC the expression of a nucleic acid molecule encoding ApoB; or which
CC specifically hybridises with at least an 8-nucleotide portion of an
CC active site on a nucleic acid molecule encoding ApoB. A compound of the
CC invention has antilipemic, antiarteriosclerotic, antidiabetic,
CC anorectic, and cardiovascular activity. The compound may have a use in
CC gene therapy. The antisense oligonucleotide is useful for treating an
CC animal having a disease or conditions associated with ApoB, e.g. a
CC condition involving abnormal lipid metabolism, a condition involving
CC abnormal cholesterol metabolism, atherosclerosis, or a condition
CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
CC (specifically type 2 diabetes), obesity, atherosclerosis or
CC cardiovascular disease). The new compound or the antisense
CC oligonucleotide is also useful for modulating glucose levels
CC (particularly plasma or serum glucose levels) in a human or diabetic
CC animal, or for modulating serum cholesterol levels, lipoprotein levels
CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
```

CC particularly in a human. The antisense compound is also useful for
CC preventing or delaying the onset of a disease or condition associated
CC with ApOB, or the onset of an increase in glucose levels in the animal or
CC human. The present sequence is used in the exemplification of the
CC invention

XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1565 TGCTGACTCAGCAGGCCA 1584

Db 20 TACCTGTCTGTGGTGGCA 1

RESULT 1956

ABX13023

ID ABX13023 standard; DNA; 20 BP.

XX

AC ABX13023;

XX 10-MAY-2003 (first entry)

DT Oxidative stress detection PCR primer #64.

DE Oxidative stress detection; PCR; primer; ss; risk factor.

XX Oxidative stress detection; PCR; primer; ss; risk factor.

XX Homo sapiens.

XX WO2003016527-A2.

XX 27-FEB-2003.

XX 13-AUG-2002; 2002WO-EP009079.

XX 14-AUG-2001; 2001BE-00000545.

XX (PROB-) PROBIOX SA.

XX Pincemail J, Piette J, Marechal D;

XX WPI; 2003-269334/26.

XX Determining oxidative stress markers in a group of individuals by

PT comparing the amount of each of the oxidative stress markers obtained

PT from each of the group of individuals with that of the group of healthy

PT individuals.

XX Disclosure; Page 36; 67pp; English.

XX The invention relates to a method for determining oxidative stress

XX markers in a group of individuals. The method comprises determining the

XX risk factor for oxidative stress in the group, measuring the amount of at

XX least 10 different oxidative stress markers in a sample obtained from

XX each of the group of individuals, and comparing the amount of each of the

XX oxidative stress markers with the amount of each of the oxidative stress

XX markers measured in a group of healthy individuals to determine whether

XX the oxidative stress markers are increased or decreased in the group of

XX individuals carrying a risk factor for oxidative stress relative to

XX healthy individuals. This sequence represents a PCR primer used to detect

XX oxidative stress

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 621 TAAGCTGGACAACTGGGCG 640

Db 1 TGACCTTGACAAAGTGGTCG 20

RESULT 1957

ABX33984/C

ID ABX33984 standard; DNA; 20 BP.

XX

AC ABX33984;

XX 10-FEB-2003 (first entry)

XX Human interleukin 12 p40 subunit antisense oligonucleotide ISIS #139157.

XX Human; ss; antisense; interleukin 12 p40 subunit; antibacterial;

XX antinflammatory; cytostatic; infection; inflammation; tumour.

XX Homo sapiens.

XX Key

FT modified_base

FT 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "All cytosines are 5-methylcytidines and the

FT nucleotides are linked via a phosphorothioate backbone"

FT 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX US6448081-B1.

XX 10-SEP-2002.

XX 07-MAY-2001; 2001US-00851062.

XX 07-MAY-2001; 2001US-00851062.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Freier SM;

XX WPI; 2003-074100/07.

XX New antisense chimeric oligonucleotide, useful for modulating the

PT expression of human interleukin 12 p40 subunit, in treating or preventing

PT disease states in humans and animals, and as research reagents and

PT diagnostics.

XX Example 15; Col 45; 42pp; English.

XX The invention relates to an antisense compound 20-50 nucleobases in

XX length targeted to a start codon region, coding region, a stop codon

XX region or a 3'-untranslated region of a nucleic acid molecule encoding

XX human Interleukin 12 p40 subunit. The compound specifically hybridises

XX with one of the regions and inhibits the expression of human Interleukin

XX 12 p40 subunit. The new compound is useful for inhibiting the expression

XX of human Interleukin 12 p40 subunit in cells or tissues and comprises

XX contacting the cells or tissues in vitro with the compound, so that

XX expression of the human Interleukin 12 p40 subunit is inhibited. The

XX antisense compound may also be used as research reagents and diagnostics,

XX and as treatment or prevention of disease states, e.g. to prevent or

XX delay infection, inflammation or tumour formation, in animals and humans.

XX The present sequence is an antisense oligonucleotide of the invention

XX Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
QY 1717 CTGAGCCATGTTCACTGCG 1736
DB 111111111111111111111111
20 CTCAGCCACGGTCATCTGCC 1

RESULT 1958
ABZ83986
ID ABZ83986 standard; DNA; 20 BP.
XX AC ABZ83986;
XX DT 14-MAY-2003 (first entry)
XX DE Toxicologically relevant rat PCR primer #1145.
XX KW Toxicologically relevant gene; toxicological response; PCR primer; ss.
XX OS Rattus sp.
XX OS Synthetic.
XX FN WO2003016500-A2.
XX PD 27-FEB-2003.
XX PF 16-AUG-2002; 2002WO-US026514.
XX PR 16-AUG-2001; 2001US-0313080P.
XX PA (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
XX PI Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schweiser K;
XX PI Alen P;
XX DR WPI; 2003-268322/26.
XX PT Determining a toxicological response to an agent, useful for screening of
XX PT drugs, comprises comparing the expression profile of one or more human
XX PT toxic response genes to a reference gene expression profile indicative of
XX PT toxicity.
XX PS Claim 1; Page 326; 455pp; English.
XX CC The present invention describes a method (M1) for determining a
XX CC toxicological response to an agent, which comprises comparing the
XX CC expression profile of one or more human toxic response genes to a
XX CC reference gene expression profile indicative of toxicity, and so
XX CC determining the presence of a toxic response to the agent. Also
XX CC described: (1) an array comprising one or more polynucleotides selected
XX CC from the genes corresponding to the partial sequences given in AB282842
XX CC ; and (2) determining if a gene putatively identified to be a toxic
XX CC response gene plays a role on toxic response pathways by determining the
XX CC expression profile of the gene after exposure of cells or a human subject
XX CC to a known toxic pharmaceutical or industrial agent, comprising: (a)
XX CC exposing cells to an agent or isolating cells from a human subject who
XX CC was exposed to an agent; (b) obtaining the test gene expression profile
XX CC for a putatively identified toxic response gene after exposure to a known
XX CC toxic pharmaceutical or industrial agent; and (c) comparing the test
XX CC profile to the expression profile of a gene with a similar function or
XX CC comparing the test profile to the expression profile of that gene after
XX CC exposure to other known toxic compounds. The methods are useful for
XX CC predicting and determining toxicological responses on a cellular, organ
XX CC or system level. The arrays comprising the human genes are useful for
XX CC toxicological screening of drugs, pharmaceutical compounds and chemicals
XX CC
XX CC Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 357 TGAAGGGCAGAGTGGTCAGG 376
DB 111111111111111111111111
1 TGAAGGGCAGAGTGGTCAGG 20

RESULT 1959
ADA26797/c
ID ADA26797 standard; DNA; 20 BP.
XX AC ADA26797;
XX DT 20-NOV-2003 (first entry)
XX DE Human PRL-3 forward PCR primer #81.
XX KW Metastasis; neoplastic growth; detection; prediction;
XX KW neoplastic growth marker; drug screening; cancer; tumour;
XX KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;
XX KW drug targeting; chromosome 8q24.3; human;
XX KW protein tyrosine phosphatase type IVA member 3; PRL-3; cytostatic;
XX KW reverse transcription-PCR; RT-PCR; primer; ss.
XX OS Homo sapiens.
XX FN WO2003031930-A2.
XX PD 17-APR-2003.
XX PF 02-OCT-2002; 2002WO-US031247.
XX PR 09-OCT-2001; 2001US-0327332P.
XX PA (UWJO ) UNIV JOHNS HOPKINS.
XX PI Vogelstein B, Kinzler KW, Saha S, Bardelli A;
XX DR WPI; 2003-393457/37.
XX PT Identifying regions of neoplastic growth in a human body, useful for
XX PT detecting or predicting metastasis, comprises administering to the human
XX PT body an antibody or peptide that specifically binds to a protein marker
XX PT of neoplastic growth.
XX PS Example 2; Page 22; 42pp; English.
XX CC The invention relates to methods for identifying regions of neoplastic
XX CC growth in a human patient, especially for detecting or predicting
XX CC metastasis. The methods involve determining whether a neoplastic growth
XX CC marker protein is overexpressed, either by the use of an antibody
XX CC specific for the protein or by the use of PCR or hybridisation to detect
XX CC nucleic acids encoding the marker proteins. A set of neoplastic growth
XX CC markers are disclosed (SAGE (serial analysis of gene expression) tags for
XX CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase
XX CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic
XX CC growth marker. The neoplastic growth markers are specifically expressed
XX CC at a higher level in metastatic cancers, compared with advanced and early
XX CC stage cancers and normal cells from which the cancer is derived.
XX CC Overexpression of the neoplastic growth markers is taken as an indication
XX CC that the tissue has a propensity to metastasise. The invention also
XX CC encompasses methods for treating a patient with an advanced or metastatic
XX CC cancer, and for identifying candidate drugs for treating advanced or
XX CC metastatic cancers. The methods of the invention are useful for
XX CC identifying regions of neoplastic growth, for detecting or predicting
XX CC metastasis, or identifying candidate drugs for treating advanced or
XX CC metastatic cancers. The invention is particularly applicable to
XX CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies
XX CC which bind to the neoplastic growth marker proteins are additionally
XX CC useful for diagnostic imaging and for targeting cytotoxic or
XX CC chemotherapeutic drugs. The present sequence represents a reverse
XX CC transcription-PCR (RT-PCR) primer used to study the upregulation of the
XX CC human PRL-3 gene (located at chromosome 8q24.3) in an example of the
XX CC invention.
XX CC Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
```

```

CC  a human raf mRNA
XX
SQ  Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0

QY      1186 ATGGCCACAGGCGGTCCCT 1205
      ||||| ||||| |||||
DB      20 ATGGCTCCAGGCGCTTACCT 1

RESULT 1961
ADUJ72244
ID      ADUJ72244 standard; DNA; 20 BP.
XX
XX      ADUJ72244;
XX
XX      06-MAY-2004 (first entry)
XX
XX      Streptomyces roseosporus daptomycin biosynthesis gene cluster primer P92.
DE
DE      antibacterial; gene therapy; daptomycin biosynthesis gene cluster;
XX      daptomycin non-ribosomal peptide synthetase; DptBC;
XX      gram-positive bacterial infection; ss; primer.

```

Example 2; SEQ ID NO 145; 292pp; English.

The invention relates to new isolated nucleic acid (NA) molecules from the *Streptomyces roseosporus* daptomycin biosynthesis gene cluster, especially a daptomycin non-ribosomal peptide synthetase (NRPS) or its subunit, where the (NA) molecule encodes DptBC, and is not PRUH159. The methods and compositions of the present invention are useful for treatment of a gram-positive bacterial infection of any organ or tissue in the body, including skeletal muscle, skin, bloodstream, kidneys, heart, lung and bone. This sequence represents a PCR primer used to isolate and amplify the daptomycin biosynthesis gene cluster (ADJ72363).

Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

| | | | | |
|-----------------------|--------------|--------------------|---------------|------------|
| Query Match | 0.8% | Score 13.6; | DB 1; | Length 20; |
| Best Local Similarity | 80.0%; | Pred. No. 1.1e+03; | | |
| Matches 15; | Conservative | 0; | Mismatches 4; | Indels 0; |
| Gaps | | | | |

RESULT 1962
ADJ95311
ID ADJ95311 standard; DNA; 20 BP.
AC
XX
AC ADJ95311;
XX
DT 06-MAY-2004 (first entry)
XX
DE Novel NOVX gene sequence reverse primer #29.
XX
KW antidiabetic; anorectic; cardiatic; hypotensive; antiarteriosclerotic;
KW anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic;
KW neuroprotective; antiparkinsonian; anticonvulsant; osteopathic;
KW antiarthritis; antiinflammatory; dermatological; antiasthmatic;
KW antileptic; gene therapy; metabolic disorder; diabetes; obesity;
KW infectious disease; anorexia; cancer; cardiovascular disease;
KW hypertension; atherosclerosis; neurodegenerative disorder;
KW Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder;
KW osteoarthritis; hematopoietic disorder; inflammatory skin disorder;
KW asthma; dyslipidemia; neurogenesis; cell differentiation;
KW cell proliferation; hematopoiesis; wound healing; angiogenesis;
KW chromosome mapping; tissue typing; pharmacogenomic; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003040325-A2.
XX
PD 15-MAY-2003.
XX
PF 05-NOV-2002; 2002WO-US035464.
XX
PR 05-NOV-2001; 2001US-0338626P.
PR 06-NOV-2001; 2001US-0333072P.
PR 09-NOV-2001; 2001US-0348283P.
PR 15-NOV-2001; 2001US-0335610P.
PR 16-NOV-2001; 2001US-0338543P.
PR 20-NOV-2001; 2001US-0331630P.
PR 20-NOV-2001; 2001US-0331641P.
PR 21-NOV-2001; 2001US-0332152P.
PR 28-NOV-2001; 2001US-0333461P.
PR 28-NOV-2001; 2001US-0333912P.
PR 29-NOV-2001; 2001US-0334027P.
PR 29-NOV-2001; 2001US-0334300P.
PR 30-NOV-2001; 2001US-0334421P.
PR 30-NOV-2001; 2001US-0334526P.
PR 04-DEC-2001; 2001US-0336576P.
PR 07-DEC-2001; 2001US-0336664P.
PR 07-DEC-2001; 2001US-0338314P.
PR 10-DEC-2001; 2001US-0338390P.
PR 10-DEC-2001; 2001US-0339006P.
PR 11-DEC-2001; 2001US-0339286P.
PR 01-FEB-2002; 2002US-0353280P.
PR 01-FEB-2002; 2002US-0353288P.
PR 04-FEB-2002; 2002US-0354392P.
PR 04-FEB-2002; 2002US-0354393P.
PR 04-FEB-2002; 2002US-0354409P.
PR 27-FEB-2002; 2002US-0359944P.
PR 27-FEB-2002; 2002US-0360148P.
PR 05-MAR-2002; 2002US-0361790P.
PR 05-MAR-2002; 2002US-0361833P.
PR 05-MAR-2002; 2002US-0361925P.
PR 05-MAR-2002; 2002US-0362230P.
PR 05-MAR-2002; 2002US-0362625P.
PR 13-MAR-2002; 2002US-0364000P.
PR 13-MAR-2002; 2002US-0364181P.
PR 13-MAR-2002; 2002US-0364182P.
PR 13-MAR-2002; 2002US-0364197P.
PR 13-MAR-2002; 2002US-0364272P.
PR 17-MAY-2002; 2002US-0361621P.
PR 28-MAY-2002; 2002US-0383675P.
PR 17-JUL-2002; 2002US-0396703P.
PR 06-AUG-2002; 2002US-0401552P.

PR 07-AUG-2002; 2002US-0401594P.
PR 07-AUG-2002; 2002US-0401787P.
PR 15-AUG-2002; 2002US-0403619P.
PR 20-AUG-2002; 2002US-0404821P.
PR 23-AUG-2002; 2002US-0405368P.
PR 23-AUG-2002; 2002US-0405402P.
PR 23-AUG-2002; 2002US-0405496P.
PR 23-AUG-2002; 2002US-0405631P.
PR 26-AUG-2002; 2002US-0406125P.
PR 04-NOV-2002; 2002US-00287226.
XX
XX (CURA-) CURAGEN CORP.
XX
PI Agee ML, Alsobrook JP, Berghs C, Boldog FL, Burgess CE, Chant JS;
PI Chaudhuri A, Dipippo VA, Edinger SR, Eisen A, Ellerman K;
PI Gangolli EA, Gorman L, Gerlach VL, Ji W, Kekuda R, Khrantsov NV;
PI Li L, Malyankar UM, Macdougall JR, Mezes PS, Miller CE, Millet I;
PI Cui CE, Ort T, Padigaru M, Patturajan M, Rastelli L, Rieger DK;
PI Rothenberg ME, Shenoy SG, Spaderna SK, Spytek RA, Taupier RJ;
PI Vernet CAM, Zerhusen BD, Zhong M;
XX WPI; 2003-441551/41.
DR
XX New isolated NOVX polypeptides and polynucleotides, useful for
XX preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX
PS Disclosure; SEQ ID NO 539; 800pp; English.
XX
CC The invention relates to novel isolated polypeptides, mature forms of
CC these, or a sequence that is at least 95 % identical to, or having one or
CC more conservative amino acid substitutions in the polypeptides. The
CC polypeptides, nucleic acid molecules and antibodies are useful in the
CC manufacture of a medicament for treating a syndrome associated with a
CC human disease, preferably a NOVX-associated disorder. The nucleic acid
CC molecules, polypeptides and antibodies are useful for treating,
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC hematopoietic disorders, inflammatory skin disorders, asthma, and various
CC dyslipidemias. The nucleic acids and polypeptides may also be used as
CC targets for the identification of small molecules that modulate or
CC inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC hematopoiesis, wound healing and angiogenesis, in gene therapy, in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridization probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. This sequence
CC corresponds to a reverse primer for the genes encoding one of the NOVX
CC polypeptides of the invention.
XX
SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 275 CTGCTCTGGGGAACCTCGT 294
Db 1 CAGCTCTGGGGAATTTGT 20
RESULT 1963
ADL25030/c
ID ADL25030 standard; DNA; 20 BP.
XX
XX ADL25030;
AC
XX
DT 20-MAY-2004 (first entry)
XX

DE Intestinal epithelium/peyer's patch M cell-associated PCR primer #175.
 XX Intestinal epithelium cell development; peyer's patch M cell development;
 KW inflammatory bowel disease; glutenenteropathy; infectious disease;
 KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
 KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;
 KW immune system disorder; hypersensitivity; anaphylaxis;
 KW blood group incompatibility; ss; human; PCR; primer.
 XX Homo sapiens.
 XX WO200280852-A2.
 XX 17-OCT-2002.
 XX 04-APR-2002; 2002WO-US010873.
 XX 04-APR-2001; 2001US-0281416P.
 XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
 XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;
 XX WPI; 2003-075470/07.
 XX Novel isolated or purified polypeptide encoded by genes associated with
 PT intestinal epithelium or M cell development, differentiation or function,
 PT useful for treating autoimmune diseases and infectious diseases.
 XX Disclosure; SEQ ID NO 540; 152pp; English.
 XX The invention comprises DNA sequences which are associated with
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the
 CC invention are useful for assessing, modifying, modulating or regulating
 CC intestinal epithelium or M cell development. The DNA sequences of the
 CC invention are also useful in the treatment of: inflammatory bowel
 CC disease, glutenenteropathy, infectious diseases, autoimmune diseases
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),
 CC diseases or disorders of the immune system, hypersensitivity,
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence
 CC represents a PCR primer that was used to amplify an intestinal
 CC epithelium/peyer's patch M cell-associated DNA sequence of the invention.
 XX
 XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 380 CAGCCACGTCCTCGATGAG 399
 DB 20 CAGCCACGTCACAGAAGTG 1
 RESULT 1964
 ADM07061
 ID ADM07061 standard; DNA; 20 BP.
 XX ADM07061;
 XX 20-MAY-2004 (first entry)
 XX Aspergillus fumigatus Essential For Growth DNA PCR primer #16.
 XX ss; primer; fungicide; gene therapy; Essential For Growth; EFG;
 KW fungal infection.
 XX Aspergillus fumigatus.
 XX WO2003076464-A2.
 XX 18-SEP-2003.
 PD

XX 13-MAR-2003; 2003WO-IB001374.
 XX 13-MAR-2002; 2002US-0363543P.
 PR 19-DEC-2002; 2002US-0434407P.
 XX (FARB) BAYER CROPS SCIENCE SA.
 PA (INSP) INST PASTEUR.
 XX Grosjean-Cournoyer M, D'enfert CD, Firon A, Villalba F, Lebrun M;
 PI Beffa R;
 XX WPI; 2003-748377/70.
 XX New nucleic acid encoding an Essential For Growth (EFG) polypeptide,
 PT useful for preparing a composition for treating fungal infection caused
 PT by Aspergillus fumigatus.
 XX Disclosure; SEQ ID NO 76; 259pp; English.
 XX The invention relates to a nucleic acid encoding an Essential For Growth
 CC (EFG) polypeptide. The nucleic acid is useful for preparing a composition
 CC for treating fungal infection caused by Aspergillus fumigatus. This
 CC sequence corresponds to a PCR primer for one of the genes of the
 CC invention.
 XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1045 GCCGAGCCAGTCATCC 1064
 DB 1 GCTGAGCCATGTCATCAC 20
 RESULT 1965
 ADM57531
 ID ADM57531 standard; DNA; 20 BP.
 XX ADM57531;
 XX 03-JUN-2004 (first entry)
 XX M. tuberculosis PCR primer katG-2154,872-SEQ-R.
 XX antibacterial; vaccine; mmpL6; Mycobacterium; BCG; Tbd1; ss; PCR; primer.
 XX Mycobacterium tuberculosis.
 XX EPI338657-A1.
 XX 27-AUG-2003.
 XX 25-FEB-2002; 2002EP-00290458.
 XX 25-FEB-2002; 2002EP-00290458.
 XX (INSP) INST PASTEUR.
 XX Cole S, Brosch R, Gordon S, Eiglmeier K, Garnier T;
 XX WPI; 2003-699254/67.
 XX New Tbd1 nucleic acids having the mutation CTG to CGG at codon 463 of
 PT gene katG, useful for distinguishing Mycobacterium tuberculosis infection
 PT from M. africanum, M. canettii, M. microti, M. bovis, or M. bovis BCG
 PT infection.
 XX Disclosure; Page 21; 73pp; English.
 XX The invention relates to a novel isolated or purified nucleic acid. A
 CC

CC polypeptide encoded by a nucleic acid of the invention has antibacterial
 CC activity, and may have a use in a vaccine. The nucleic acid is a TbD1
 CC nucleic acid having a fully defined sequence of 3953 bp given in the
 CC specification. The TbD1 deletion or mmpL6 551 polymorphism is useful as a
 CC genetic marker for the differentiation of Mycobacterium strain of M.
 CC tuberculosis complex. The genetic marker in association with at least one
 CC genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8,
 CC RD9, RD10, RD11, RD13, RD14, RDV1, RDV2, RDV3, RDV4, RDV5, katG463,
 CC gyrA95, oxyR'285, and pncA57, may be used for the differentiation of
 CC Mycobacterium strain of M. tuberculosis complex. The nucleic acids may
 CC also be used to distinguish an infection resulting from M. tuberculosis
 CC from an infection resulting from M. africanum, M. canetti, M. microti, M.
 CC bovis, M. bovis BCG. The present sequence is used in the exemplification
 CC of the invention.

SQ Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 962 AGAAGTGTCTACACCGAGAC 981

Db 1 ACAAGCTGATCCACCGAGAC 20

RESULT 1966

ADM57474/c

ID ADM57474 standard; DNA; 20 BP.

XX AC ADM57474;

XX DT 03-JUN-2004 (first entry)

XX DE M. tuberculosis PCR primer RDS5A-Rv2348.int.F.

XX KW antibacterial; vaccine; mmpL6; Mycobacterium; BCG; TbD1; ss; PCR; primer.

XX OS Mycobacterium tuberculosis.

XX PN EPI338657-A1.

XX PD 27-AUG-2003.

XX PF 25-FEB-2002; 2002EP-00290458.

XX PR 25-FEB-2002; 2002EP-00290458.

XX PA (INSP) INST PASTEUR.

XX PI Cole S, Brosch R, Gordon S, Eiglmeier K, Garnier T;

XX DR WPI; 2003-699254/67.

XX PT New TbD1 nucleic acids having the mutation CTG to CGG at codon 463 of
 gene katG, useful for distinguishing Mycobacterium tuberculosis infection
 from M. africanum, M. canetti, M. microti, M. bovis, or M. bovis BCG
 infection.

XX PS Disclosure; Page 19; 73pp; English.

XX CC The invention relates to a novel isolated or purified nucleic acid. A
 CC polypeptide encoded by a nucleic acid of the invention has antibacterial
 CC activity, and may have a use in a vaccine. The nucleic acid is a TbD1
 CC nucleic acid having a fully defined sequence of 3953 bp given in the
 CC specification. The TbD1 deletion or mmpL6 551 polymorphism is useful as a
 CC genetic marker for the differentiation of Mycobacterium strain of M.
 CC tuberculosis complex. The genetic marker in association with at least one
 CC genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8,
 CC RD9, RD10, RD11, RD13, RD14, RDV1, RDV2, RDV3, RDV4, RDV5, katG463,
 CC gyrA95, oxyR'285, and pncA57, may be used for the differentiation of
 CC Mycobacterium strain of M. tuberculosis complex. The nucleic acids may
 CC also be used to distinguish an infection resulting from M. tuberculosis

CC from an infection resulting from M. africanum, M. canetti, M. microti, M.
 CC bovis, M. bovis BCG. The present sequence is used in the exemplification
 CC of the invention.

SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 43 GGAGGACCAAGCTGTGACT 62

Db 20 GGAGTAGCAGCAGCGTGATT 1

RESULT 1967

ADM34286/c

ID ADM34286 standard; DNA; 20 BP.

XX AC ADM34286;

XX DT 03-JUN-2004 (first entry)

XX DE Mouse p38 MAPK antisense oligonucleotide #13.

XX KW antisense; p38 mitogen activated protein kinase; p38 MAPK;
 KW inflammatory disease; autoimmune disease; rheumatoid arthritis;
 KW heart disease; ss; mouse.

XX OS Mus musculus.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= Other

FT /note= "All cytosines are 5-methyl cytosines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

FT modified_base 6..15

FT /*tag= c

FT /mod_base= Other

FT /note= "Phosphorothioate linkages"

FT modified_base 16..20

FT /*tag= d

FT /mod_base= Other

FT /note= "2'-methoxyethoxy nucleotides"

XX PN US2003176383-A1.

XX PD 18-SEP-2003.

XX PF 09-SEP-2002; 2002US-00238442.

XX PR 06-APR-1999; 99US-00286904.

XX DR 15-AUG-2000; 2000US-00640101.

XX PA (MONI/) MONIA B P.

XX PA (GAAR/) GAARDE W A.

XX PA (NERO/) NERO P.

XX PA (MCKA/) MCKAY R.

XX PI Monia BP, Gaarde WA, Nero P, Mckay R;

XX DR WPI; 2003-898587/82.

XX PT New antisense oligonucleotides for modulating p38 mitogen activated
 PT protein kinase (MAPK) expression, useful for diagnosing, preventing or
 PT treating diseases associated with p38 MAPK, e.g. inflammation or heart
 PT disease.

XX PS Example 5; SEQ ID NO 75; 48pp; English.

CC vaccine in order to reduce immunogenicity to Factor VIII in a patient.
 CC The modified Factor VIII molecule is useful in preparing a composition
 CC for treating e.g., Gaucher's disease. This polynucleotide sequence
 CC represents a primer used in the exemplification of the invention.
 CC
 CC Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 CC

QY 1700 ACTCTCTCCCTACCTGCGCTG 1719
 |||||
 DB 1 AATCTCTGCTTACCAGCATG 20

RESULT 1969
 ADN60140/c
 ID ADN60140 standard; DNA; 20 BP.
 XX
 AC ADN60140;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human helicase-moi, antisense oligonucleotide #60.
 XX
 KW Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;
 KW hyperproliferative disorder; RNA-mediated interference; probe.
 XX
 OS Homo sapiens.
 XX

Key Location/Qualifiers
 modified_base 1..20
 FT /*tag= b
 FT /mod_base= Other
 FT /note= "Phosphorothioate linkages. All cytidines are 5'-
 modified_base 1..5
 FT /*tag= a
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 modified_base 16..20
 FT /*tag= c
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX
 PN US2003176380-A1.
 XX
 XX 18-SEP-2003.
 XX
 XX 31-MAY-2002; 2002US-00160632.
 XX
 XX 10-MAY-2001; 2001US-00853768.
 XX
 XX (WARD/) WARD D T.
 XX (WATT/) WATT A T.
 XX
 XX Ward DT, Watt AT;
 XX
 XX WPI; 2003-898586/82.
 XX
 XX New antisense oligonucleotides for modulating helicase-moi expression,
 XX useful for diagnosing, preventing or treating diseases or conditions
 XX associated with helicase-moi, e.g. inflammation or hyperproliferative
 XX disorders.
 XX
 XX Example 14; SEQ ID NO 73; 56pp; English.
 XX
 XX The invention relates to antisense oligonucleotides, compositions and
 XX methods for modulating the expression of helicase-moi. The
 XX oligonucleotides are used in treating an animal having a disease or
 XX condition associated with helicase-moi, such as inflammation, a
 XX hyperproliferative disorder or a condition that arises from RNA-mediated

XX The invention relates to an antisense oligonucleotide 8-30 nucleobases in
 CC length targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid molecule encoding a p38 mitogen activated protein kinase (MAPK). The
 CC where the antisense compound inhibits the expression of the p38 MAPK. The
 CC antisense oligonucleotide is useful for inhibiting the expression of p38
 CC MAPK in cells or tissues. It is also useful for treating an animal having
 CC a disease or condition associated with p38 MAPK, e.g. an inflammatory or
 CC an autoimmune disease (e.g. rheumatoid arthritis) or a heart disease. In
 CC addition, the compound is used for diagnostics, prophylaxis, or as
 CC research reagents or kits. The present sequence represents a p38 MAPK
 CC antisense oligonucleotide of the invention.
 XX

Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 CC

QY 1153 GACATGTGGGGTGTGGGCTG 1172
 |||||
 DB 20 GACATCTGCTGTGGGCTG 1

RESULT 1968
 ADM75855
 ID ADM75855 standard; DNA; 20 BP.
 XX
 AC ADM75855;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Human Factor VIII gene clone primer, SEQ ID No 16.
 XX
 KW human Factor VIII; non-immunogenic; immunogenic; T-cell epitope;
 KW MHC class II; ligand; vaccine; immunogenicity; Gaucher's disease; ss;
 KW primer.
 XX
 OS Homo sapiens.
 XX
 XX WO2003087161-A1.
 XX
 XX 23-OCT-2003.
 XX
 XX 17-APR-2003; 2003WO-EP004063.
 XX
 XX 18-APR-2002; 2002EP-00008712.
 XX
 XX 24-MAR-2003; 2003EP-00006554.
 XX
 XX (MERE) MERCK PATENT GMBH.
 XX
 XX Jones T, Baker M, Carr FJ;
 XX
 XX WPI; 2003-845307/78.
 XX
 XX New modified human Factor VIII molecule being substantially non-
 XX immunogenic or less immunogenic than non-modified human Factor VIII,
 XX useful in preparing a composition for treating e.g., Gaucher's disease.
 XX
 XX Example 2; SEQ ID NO 16; 68pp; English.
 XX
 XX The invention relates to a novel modified human Factor VIII molecule. The
 XX modified human Factor VIII molecule being substantially non-immunogenic
 XX or less immunogenic than a non-modified human Factor VIII and having
 XX essentially the same biological specificity and activity when used in
 XX vivo. The modified human Factor VIII molecule comprises specifically
 XX altered amino acid residues compared with the non-modified parental
 XX molecule, where the altered amino acid residues cause a reduction or an
 XX elimination of one or more of the T-cell epitopes, which act in the
 XX parental non-modified molecule as MHC class II binding ligands and
 XX stimulate T-cells. The potential MHC class II binding activity peptide is
 XX useful for the manufacture of the modified Factor VIII molecule or a

CC interference. The present sequence represents a human helicase-moi
CC antisense oligonucleotide.
SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1380 GCCGACCTCCACCAAGC 1399
DB 20 GGACTACTCATACCAAGC 1
RESULT 1970
ABD25055
ID ABD25055 standard; DNA; 20 BP.
XX
AC ABD25055;
XX
DT 29-JUL-2004 (first entry)
XX
DE A1125228-derived oligonucleotide SEQ ID 4067.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4067; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

SQ Sequence 20 BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1485 CAACTTCTGACACTACTT 1504

DB 1 CAACTTCTGATTTTAATT 20

RESULT 1971

ABD29080/C

ID ABD29080 standard; DNA; 20 BP.

XX

AC ABD29080;

XX

DT 29-JUL-2004 (first entry)

XX

DE AA679352-derived oligonucleotide SEQ ID 8092.

XX

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS
XX
PN WO200285309-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

PR 24-APR-2001; 2001US-0286036P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-093058/08.

XX

PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX

PS Claim 15; SEQ ID NO 8092; 763pp; English.

XX

CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or surfactant hypoproduction are associated
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 657 CGTCTACAAAGGCACAAAGCA 676

Db 20 CTCTCAAAAGGTCAAAAGCA 1

RESULT 1972

ABD21831/c

ID ABD21831 standard; DNA; 20 BP.

AC ABD21831;

XX 29-JUL-2004 (first entry)

DE Human stanniocalcin-derived oligo SEQ ID 843.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 843; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine, (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 763 CTGCTCAAGGACCTCAAAACA 782

Db 20 CTGCTCAAGGACCAAGGCA 1

RESULT 1973

ABD24306

ID ABD24306 standard; DNA; 20 BP.

XX ABD24306;

XX 29-JUL-2004 (first entry)

DE AI095013-derived oligonucleotide DNA SEQ ID 3318.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

XX

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S; WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 3318; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

457 GAGGACATCAACAGCGCCT 476
||||| ||||||| |||
1 GAGGAGCTCAACAGCTGCT 20

RESULT 1974
ABD28833/c

ID ABD28833 standard; DNA; 20 BP.

AC ABD28833;

XX

29-JUL-2004 (first entry)

XX

DE

WB1570-derived oligonucleotide SEQ ID 7845.

XX

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

| | | | |
|----|---|----|--|
| XX | Result 1975 | XX | Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other; |
| XX | ABD23363/c | XX | Query Match 0.8%; Score 13.6; DB 1; Length 20; |
| XX | ABD23363 standard; DNA; 20 BP. | XX | Best Local Similarity 80.0%; Pred. No. 1.1e+03; |
| XX | ABD23363; | XX | Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps |
| XX | 29-JUL-2004 (first entry) | | |
| XX | Human myosin X-derived oligonucleotide SEQ ID 2375. | | |
| XX | Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; | | |
| XX | respiratory tract inflammation; adenosine sensitivity; lung; cancer; | | |
| XX | surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic; | | |
| XX | analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis; | | |
| XX | beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; | | |
| XX | respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; | | |
| XX | emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; | | |
| XX | pulmonary transplantation rejection; ss; primer. | | |
| XX | Homo sapiens. | | |
| XX | WO200285309-A2. | | |
| XX | 31-OCT-2002. | | |
| XX | 23-APR-2002; 2002WO-US013143. | | |
| XX | 24-APR-2001; 2001US-0286036P. | | |
| XX | (EPIG-) EPIGENESIS PHARM INC. | | |
| XX | Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; | | |
| XX | Miller S, Tang L, Shahabuddin S; | | |
| XX | WPI; 2003-093058/08. | | |
| XX | Pharmaceutical composition for treating asthma, has antisense | | |
| XX | oligonucleotide containing less percentage of adenosine, targeted to | | |
| XX | nucleic acids associated with lung airway or lung dysfunction, and | | |
| XX | bronchodilating agent. | | |
| XX | Claim 15; SEQ ID NO 2375; 763pp; English. | | |
| XX | This invention describes a novel composition (a) a first active agent, | | |
| XX | comprising oligonucleotides, effective for alleviating | | |
| XX | bronchoconstriction, respiratory tract inflammation, allergies and | | |
| XX | reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, | | |
| XX | surfactant depletion or hyposecretion, when administered to a mammal. The | | |
| XX | oligonucleotides are derived from a gene encoding or regulating | | |
| XX | expression of a target polypeptide associated with lung airway or lung | | |
| XX | dysfunction or cancer and can be anti-sense to the corresponding mRNA. | | |
| XX | The invention also describes a kit, that comprises: (a) a delivery | | |
| XX | device, in separate containers, (b) the oligonucleotides, (c) | | |
| XX | instructions for adding a carrier and for use of the kit. The composition | | |
| XX | of the invention has anti-allergic, anti-inflammatory, antiasthmatic, | | |
| XX | analgesic, hypotensive, immunosuppressive and cytostatic activity, is a | | |
| XX | beta-adrenergic agonist. The composition is useful for preventing or | | |
| XX | treating a respiratory, lung or malignant disease. The administered | | |
| XX | composition comprises oligo and is administered to reduce the production | | |
| XX | or availability, or to increase the degradation of the target mRNA or to | | |
| XX | reduce the amount of target polypeptide present in the lungs. The | | |
| XX | pulmonary obstruction, and/or bronchoconstriction in the lung | | |
| XX | inflammation, allergies and/or surfactant hypoproduction are associated | | |
| XX | with a disease or condition such as pulmonary vasoconstriction. | | |
| XX | Inflammation, allergies, asthma, impeded respiration, respiratory | | |
| XX | distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary | | |
| XX | hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary | | |
| XX | transplantation rejection, pulmonary infections, bronchitis or cancer. | | |
| XX | The reduced adenosine content of the anti-sense oligos corresponding to | | |
| XX | thymidines present in the target RNA serves to prevent the breakdown of | | |
| XX | the oligonucleotides into products that free adenosine into the system | | |
| XX | e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to | | |

| | | | |
|----|---|----|--|
| XX | Result 1975 | XX | Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other; |
| XX | ABD23363/c | XX | Query Match 0.8%; Score 13.6; DB 1; Length 20; |
| XX | ABD23363 standard; DNA; 20 BP. | XX | Best Local Similarity 80.0%; Pred. No. 1.1e+03; |
| XX | ABD23363; | XX | Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps |
| XX | 29-JUL-2004 (first entry) | | |
| XX | Human myosin X-derived oligonucleotide SEQ ID 2375. | | |
| XX | Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; | | |
| XX | respiratory tract inflammation; adenosine sensitivity; lung; cancer; | | |
| XX | surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic; | | |
| XX | analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis; | | |
| XX | beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; | | |
| XX | respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; | | |
| XX | emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; | | |
| XX | pulmonary transplantation rejection; ss; primer. | | |
| XX | Homo sapiens. | | |
| XX | WO200285309-A2. | | |
| XX | 31-OCT-2002. | | |
| XX | 23-APR-2002; 2002WO-US013143. | | |
| XX | 24-APR-2001; 2001US-0286036P. | | |
| XX | (EPIG-) EPIGENESIS PHARM INC. | | |
| XX | Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; | | |
| XX | Miller S, Tang L, Shahabuddin S; | | |
| XX | WPI; 2003-093058/08. | | |
| XX | Pharmaceutical composition for treating asthma, has antisense | | |
| XX | oligonucleotide containing less percentage of adenosine, targeted to | | |
| XX | nucleic acids associated with lung airway or lung dysfunction, and | | |
| XX | bronchodilating agent. | | |
| XX | Claim 15; SEQ ID NO 2375; 763pp; English. | | |
| XX | This invention describes a novel composition (a) a first active agent, | | |
| XX | comprising oligonucleotides, effective for alleviating | | |
| XX | bronchoconstriction, respiratory tract inflammation, allergies and | | |
| XX | reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, | | |
| XX | surfactant depletion or hyposecretion, when administered to a mammal. The | | |
| XX | oligonucleotides are derived from a gene encoding or regulating | | |
| XX | expression of a target polypeptide associated with lung airway or lung | | |
| XX | dysfunction or cancer and can be anti-sense to the corresponding mRNA. | | |
| XX | The invention also describes a kit, that comprises: (a) a delivery | | |
| XX | device, in separate containers, (b) the oligonucleotides, (c) | | |
| XX | instructions for adding a carrier and for use of the kit. The composition | | |
| XX | of the invention has anti-allergic, anti-inflammatory, antiasthmatic, | | |
| XX | analgesic, hypotensive, immunosuppressive and cytostatic activity, is a | | |
| XX | beta-adrenergic agonist. The composition is useful for preventing or | | |
| XX | treating a respiratory, lung or malignant disease. The administered | | |
| XX | composition comprises oligo and is administered to reduce the production | | |
| XX | or availability, or to increase the degradation of the target mRNA or to | | |
| XX | reduce the amount of target polypeptide present in the lungs. The | | |
| XX | pulmonary obstruction, and/or bronchoconstriction in the lung | | |
| XX | inflammation, allergies and/or surfactant hypoproduction are associated | | |
| XX | with a disease or condition such as pulmonary vasoconstriction. | | |
| XX | Inflammation, allergies, asthma, impeded respiration, respiratory | | |
| XX | distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary | | |
| XX | hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary | | |
| XX | transplantation rejection, pulmonary infections, bronchitis or cancer. | | |
| XX | The reduced adenosine content of the anti-sense oligos corresponding to | | |
| XX | thymidines present in the target RNA serves to prevent the breakdown of | | |
| XX | the oligonucleotides into products that free adenosine into the system | | |
| XX | e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to | | |

CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1481 TCCACAAACTTCTGACACT 1500
 Db ||||| ||||| ||||| |||||
 20 TCCAGAAACGTTTAACT 1
 RESULT 1977
 ABD28647
 ID ABD28647 standard; DNA; 20 BP.
 AC ABD28647;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE T64626-derived oligonucleotide SEQ ID 7659.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PS Claim 15; SEQ ID NO 7659; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1052 CCAAGTCAATCCCAACAAG 1071
 Db ||||| ||||| ||||| |||||
 1 CCCAGTCACTCCACGACAG 20
 RESULT 1978
 ABD21095
 ID ABD21095 standard; DNA; 20 BP.
 XX
 AC ABD21095;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human transglutaminase-derived oligo SEQ ID 107.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX

Tue Nov 2 13:39:09 2004

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PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX Claim 15; SEQ ID NO 107; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 299 CACGGGGGCCACTCAGCTCT 318
XX ||||| ||||| |||||
XX Db 1 CACTGTCCCGCCAGCTCT 20
XX
XX RESULT 1979
XX ABD24492/c
XX ID ABD24492 standard; DNA; 20 BP.
XX XX
XX AC ABD24492;
XX
XX 29-JUL-2004 (first entry)
XX
XX At652901-derived oligonucleotide SEQ ID 3504.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX OS
XX WO200285309-A2.
XX PN
XX 31-OCT-2002.
XX PD
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XX 23-APR-2002; 2002WO-US013143.
XX PF
XX XX
XX 24-APR-2001; 2001US-0286036P.
XX PR
XX XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX PA
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX PI
XX PI
XX WPI; 2003-093058/08.
XX DR
XX XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 3504; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors. The
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic, is a
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1020 GCTCAAGCTGGCTGACTTTG 1039
XX ||||| ||||| |||||
XX Db 20 GCTAAGAGTGGCTGCTTTG 1
XX
XX RESULT 1980
XX ABD26680
XX ID ABD26680 standard; DNA; 20 BP.
XX XX
XX AC ABD26680;
XX XX
XX 29-JUL-2004 (first entry)
XX DT
XX
XX R00103-derived oligonucleotide SEQ ID 5692.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX
```

surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
pulmonary transplantation rejection; ss; primer.

Homo sapiens.

WO200285309-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;

WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense
oligonucleotide containing less percentage of adenosine, targeted to
nucleic acids associated with lung airway or lung dysfunction, and
bronchodilating agent.

Claim 15; SEQ ID NO 5692; 763pp; English.

This invention describes a novel composition (a) a first active agent,
comprising oligonucleotides, effective for alleviating
bronchoconstriction, respiratory tract inflammation, allergies and
reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
surfactant depletion or hyposecretion, when administered to a mammal. The
oligonucleotides are derived from a gene encoding or regulating
expression of a target polypeptide associated with lung airway or lung
dysfunction or cancer and can be anti-sense to the corresponding mRNA.
The invention also describes a kit, that comprises: (a) a delivery
device, in separate containers, (b) the oligonucleotides, (c)
instructions for adding a carrier and for use of the kit. The composition
of the invention has antiallergic, antiinflammatory, antiasthmatic,
analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
beta-adrenergic agonist. The composition is useful for preventing or
treating a respiratory, lung or malignant disease. The administered
composition comprises oligo and is administered to reduce the production
or availability, or to increase the degradation of the target mRNA or to
reduce the amount of target polypeptide present in the lungs. The
pulmonary obstruction, and/or bronchoconstriction and/or lung
inflammation, allergies and/or surfactant hypoproduction are associated
with a disease or condition such as pulmonary vasoconstriction,
inflammation, allergies, asthma, impeded respiration, respiratory
distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
transplantation rejection, pulmonary infections, bronchitis or cancer.

The reduced adenosine content of the anti-sense oligos corresponding to
thymidines present in the target RNA serves to prevent the breakdown of
the oligonucleotides into products that free adenosine into the system
e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
prevent any unwanted effects due to it

Sequence 20 BP; 4 A; 9 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1034 ACTTTGCGCTGGCCCGAGCC 1053

Db 1 ACTGAGCCGAGCCCGAGCC 20

RESULT 1981

ADG86690/c

ID ADG86690 standard; DNA; 20 BP.

XX

AC ADG86690;

XX

DT 11-MAR-2004 (first entry)

XX

DE Human APP-cleaving enzyme antisense oligonucleotide ISIS 223848.

XX

KW ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;
amyloid deposition; neurodegeneration; Alzheimer's disease; infection;
inflammation; tumour; antisense.

OS Synthetic.

OS Homo sapiens.

XX

PN US2003224512-A1.

XX

PD 04-DEC-2003.

XX

PF 31-MAY-2002; 2002US-00159942.

XX

PR 31-MAY-2002; 2002US-00159942.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Dobie KW;

XX

DR WPI; 2004-051909/05.

XX

PT New antisense compound targeted to a nucleic acid molecule encoding a
beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for
treating diseases associated with beta-site APP-cleaving enzyme, e.g.
neurodegeneration.

Example 15; SEQ ID NO 73; 58pp; English.

The invention relates to a compound targeted to a nucleic acid molecule
encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The
antisense oligonucleotides and compounds are useful for inhibiting the
expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,
modulating amyloid deposition in neurons, altering the expression of a
splice variant of beta-site APP-cleaving enzyme, and for treating
diseases or conditions associated with expression of beta-site APP-
cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The
antisense compounds are also useful as research reagents and kits, or in
diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or
delay infection, inflammation or tumour formation. The present sequence
represents a human APP-cleaving enzyme antisense oligonucleotide.

Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 330 TGTGCACGAGGACTTGAAGA 349

Db 20 TGTGCACGATCAGTTCAGGA 1

RESULT 1982

ADG86692/c

ID ADG86692 standard; DNA; 20 BP.

XX

AC ADG86692;

XX

DT 11-MAR-2004 (first entry)

XX

DE Human APP-cleaving enzyme antisense oligonucleotide ISIS 223850.

XX

KW ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;

```
KW amyloid deposition; neurodegeneration; Alzheimer's disease; infection;  
KW inflammation; tumour; antisense.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN US2003224512-A1.  
XX  
XX 04-DEC-2003.  
XX  
XX 31-MAY-2002; 2002US-00159942.  
XX  
XX 31-MAY-2002; 2002US-00159942.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW;  
XX WPI; 2004-051909/05.  
XX  
XX New antisense compound targeted to a nucleic acid molecule encoding a  
XX beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for  
XX treating diseases associated with beta-site APP-cleaving enzyme, e.g.  
XX neurodegeneration.  
XX  
XX Example 15; SEQ ID NO 75; 58pp; English.  
XX  
XX The invention relates to a compound targeted to a nucleic acid molecule  
XX encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The  
XX antisense oligonucleotides and compounds are useful for inhibiting the  
XX expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,  
XX modulating amyloid deposition in neurons, altering the expression of a  
XX splice variant of beta-site APP-cleaving enzyme, and for treating  
XX diseases or conditions associated with expression of beta-site APP-  
XX cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The  
XX antisense compounds are also useful as research reagents and kits, or in  
XX diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or  
XX delay infection, inflammation or tumour formation. The present sequence  
XX represents a human APP-cleaving enzyme antisense oligonucleotide.  
XX  
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 876 GGATGACTGTGGACATCA 895  
Db 20 GGAAGACTGTGGTACAACA 1  
|||||  
RESULT 1983  
ADG86742  
ID ADG86742 standard; DNA; 20 BP.  
XX  
XX AC ADG86742;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX Human APP-cleaving enzyme target region ISIS 140502.  
XX  
XX ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;  
KW amyloid deposition; neurodegeneration; Alzheimer's disease; infection;  
KW inflammation; tumour.  
XX  
XX Homo sapiens.  
XX  
XX US2003224512-A1.  
XX  
XX 04-DEC-2003.  
XX  
XX 31-MAY-2002; 2002US-00159942.  
XX  
XX
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PR 31-MAY-2002; 2002US-00159942.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW;  
XX WPI; 2004-051909/05.  
XX  
XX New antisense compound targeted to a nucleic acid molecule encoding a  
XX beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for  
XX treating diseases associated with beta-site APP-cleaving enzyme, e.g.  
XX neurodegeneration.  
XX  
XX Example 15; SEQ ID NO 125; 58pp; English.  
XX  
XX The invention relates to a compound targeted to a nucleic acid molecule  
XX encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The  
XX antisense oligonucleotides and compounds are useful for inhibiting the  
XX expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,  
XX modulating amyloid deposition in neurons, altering the expression of a  
XX splice variant of beta-site APP-cleaving enzyme, and for treating  
XX diseases or conditions associated with expression of beta-site APP-  
XX cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The  
XX antisense compounds are also useful as research reagents and kits, or in  
XX diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or  
XX delay infection, inflammation or tumour formation. The present sequence  
XX represents a human APP-cleaving enzyme target region.  
XX  
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 330 TGTGACGAGGACTTCAGCA 349  
Db 1 TGTGACGAGTGTTCAGCA 20  
|||||  
RESULT 1984  
ADG64275/C  
ID ADG64275 standard; DNA; 20 BP.  
XX  
XX AC ADG64275;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX Y copy of Adlican reverse primer cfi-4810.  
XX  
XX Y chromosome; chromosome Y; SKY1; sy83; Y-specific growth gene; GCY;  
KW primer; sex-related height difference; height; primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO2003091381-A2.  
XX  
XX 06-NOV-2003.  
XX  
XX 25-APR-2003; 2003WO-EP004546.  
XX  
XX 26-APR-2002; 2002GB-00009640.  
PR 01-JUL-2002; 2002GB-00015188.  
XX  
XX (RAPP/) RAPPOLD G A.  
XX  
XX Rappold GA, Kirsch S;  
XX WPI; 2004-108240/11.  
XX  
XX An isolated region of the Y chromosome between SKY1 and sy83 which  
XX encompasses the Y-specific growth gene GCY, for identifying the presence  
XX or absence of a GCY gene associated with height.  
XX  
XX
```

```
XX PS Claim 10; Page 31; 54pp; English.
XX CC The present invention describes an isolated region of the Y chromosome
XX CC between SKY1 and sv83 which encompasses the Y-specific growth gene GCY.
XX CC Also described: (1) an isolated GCY protein, encoded by a region of the Y
XX CC chromosome within the interval SKY1 and sv83; (2) a nucleic acid primer
XX CC having a nucleic acid sequence selected from a nucleic acid sequence as
XX CC shown in Tables 2.5, 6.7A, 7B, 7C or 8 given in the specification; (3)
XX CC studying GCY localisation or identifying a GCY gene associated with
XX CC height comprising the use of a primer in (2) to selectively amplify or
XX CC detect a region of a nucleic acid molecule; (4) an isolated protein
XX CC having greater than 65% homology to the GCY protein of (1), and which
XX CC contributes to the sex-related height difference in humans; and (5) use
XX CC of a nucleic acid molecule comprising at least a portion of the isolated
XX CC region of the Y chromosome between markers SKV8 and sv83, or a sequence
XX CC complementary to it, to identify the presence or absence of a GCY gene
XX CC associated with height. The isolated region of the Y chromosome between
XX CC SKY1 and sv83, or a sequence complementary to it, is used to identify the
XX CC presence or absence of a GCY gene associated with height. The primer is
XX CC used for studying GCY localisation or identifying a GCY gene associated
XX CC with height by selective amplification. The present sequence is used in
XX CC the exemplification of the present invention.
XX SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 56 TGTGACTGCTGAACCCAGG 75
XX DB 20 TGTCACTGCTGAACGAGC 1
XX
XX RESULT 1985
XX ADG72074/C
XX ID ADG72074 standard; DNA; 20 BP.
XX AC ADG72074;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Human SREBP-1 antisense oligonucleotide ISIS 220071.
XX
XX KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
XX KW antisense gene therapy;
XX KW sterol regulatory element-binding transcription factor; SREBF;
XX KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
XX KW hyperlipidaemia.
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate linkages. All cytidines are 5-
XX FT methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residues"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residues"
XX
XX US2003224515-A1.
XX
XX PD 04-DEC-2003.
XX
XX PF 04-JUN-2002; 2002US-00161996.
```

```
XX PR 04-JUN-2002; 2002US-00161996.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Baker BF, Dobie KW,
XX DR WPI; 2004-022079/02.
XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding sterol regulatory element-binding protein-1, useful
XX PT for treating diabetes, atherosclerosis or hyperlipidemia.
XX
XX PS Example 15; SEQ ID NO 69; 112pp; English.
XX
XX CC The invention relates to a compound 8-80 nucleobases in length targeted
XX CC to, and which specifically hybridises with a nucleic acid molecule
XX CC encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
XX CC as sterol regulatory element-binding transcription factor, SREBF), and
XX CC inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
XX CC Also included are a compound 8-80 nucleobases in length that specifically
XX CC hybridises with at least an 8-nucleobase portion of an active site on a
XX CC nucleic acid molecule encoding sterol regulatory element-binding protein-
XX CC 1, a composition comprising the compound and a carrier or diluent,
XX CC inhibiting the expression of sterol regulatory element-binding protein-1
XX CC in cells or tissues (by contacting the cells or tissues with the compound
XX CC so that expression of sterol regulatory element-binding protein-1 is
XX CC inhibited) and treating an animal having a disease or condition
XX CC associated with sterol regulatory element-binding protein-1 by
XX CC administering to the animal a therapeutic or prophylactic amount of the
XX CC compound so that expression of sterol regulatory element-binding protein-
XX CC 1 is inhibited. The antisense oligonucleotide comprises at least one
XX CC modified internucleoside linkage (preferably a phosphorothioate linkage),
XX CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
XX CC moiety) or at least one modified nucleobase (preferably 5-
XX CC methylcytosine). The compound, composition and methods are useful for
XX CC treating a disease or condition associated with sterol regulatory element
XX CC -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
XX CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
XX CC are also useful in research and diagnostics for modulating the expression
XX CC of sterol regulatory element-binding protein-1. The present sequence is
XX CC an antisense oligonucleotide targeting human SREBP-1.
XX
XX SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1026 GCTGCTGACTTGGCCTGG 1045
XX DB 20 GCAGGCTGACCTGGACCTGG 1
XX
XX RESULT 1986
XX ADG72208
XX ID ADG72208 standard; cDNA; 20 BP.
XX AC ADG72208;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Human SREBP-1 target site #45.
XX
XX KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
XX KW antisense gene therapy;
XX KW sterol regulatory element-binding transcription factor; SREBF;
XX KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
XX KW hyperlipidaemia.
XX OS Homo sapiens.
XX
XX PN US2003224515-A1.
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XX PD 04-DEC-2003.
 XX PF 04-JUN-2002; 2002US-00161996.
 XX PR 04-JUN-2002; 2002US-00161996.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Freier SM, Baker BF, Dobie KW;
 XX DR WPI; 2004-022079/02.
 XX
 PT New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding sterol regulatory element-binding protein-1, useful
 PT for treating diabetes, atherosclerosis or hyperlipidemia.
 XX
 PS Example 16; SEQ ID NO 203; 112pp; English.
 XX
 CC The invention relates to a compound 8-80 nucleobases in length targeted
 CC to, and which specifically hybridises with a nucleic acid molecule
 CC encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
 CC as sterol regulatory element-binding transcription factor, SREBF), and
 CC inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
 CC Also included are a compound 8-80 nucleobases in length that specifically
 CC hybridises with at least an 8-nucleobase portion of an active site on a
 CC nucleic acid molecule encoding sterol regulatory element-binding protein-1
 CC 1, a composition comprising the compound and a carrier or diluent,
 CC inhibiting the expression of sterol regulatory element-binding protein-1
 CC in cells or tissues (by contacting the cells or tissues with the compound
 CC so that expression of sterol regulatory element-binding protein-1 is
 CC inhibited) and treating an animal having a disease or condition
 CC associated with sterol regulatory element-binding protein-1 by
 CC administering to the animal a therapeutic or prophylactic amount of the
 CC compound so that expression of sterol regulatory element-binding protein-
 CC 1 is inhibited. The antisense oligonucleotide comprises at least one
 CC modified internucleoside linkage (preferably 2'-O-methoxyethyl sugar
 CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
 CC moiety) or at least one modified nucleobase (preferably 5-
 CC methylcytosine). The compound, composition and methods are useful for
 CC treating a disease or condition associated with sterol regulatory element
 CC binding protein-1, such as a metabolic disorder e.g. diabetes, or a
 CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
 CC are also useful in research and diagnostics for modulating the expression
 CC of sterol regulatory element-binding protein-1. The present sequence is a
 CC human SREBP-1 target region for the antisense oligonucleotides.
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1026 GCTGGCTGACTTTGGCTGG 1045
 Db 1 GCAGGCTGACTTGACCTGG 20
 RESULT 1987
 ADH18063/C
 ID ADH18063 standard; DNA; 20 BP.
 XX AC ADH18063;
 XX 11-MAR-2004 (first entry)
 XX
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 52.
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
 KW human; ss.

XX OS Homo sapiens.
 XX WO2003097662-A1.
 XX 27-NOV-2003.
 XX 15-MAY-2003; 2003WO-US015493.
 XX 15-MAY-2002; 2002US-00147196.
 XX 13-NOV-2002; 2002US-0426324P.
 XX (ISIS-) ISIS PHARM INC.
 XX Crooke RM, Graham MJ;
 XX WPI; 2004-022840/02.
 XX
 PT New antisense compound, useful for preparing a composition for treating
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
 PT 2, obesity, hyperlipidemia or cardiovascular disease.
 XX
 PS Example 15; SEQ ID NO 52; 405pp; English.
 XX
 CC The invention relates to a novel antisense compound targeted to a nucleic
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
 CC hybridises with and inhibits the expression of human apolipoprotein B.
 CC The compound of the invention demonstrates antiarteriosclerotic,
 CC cardiant, antidiabetic and anorectic activities and may be useful for
 CC preparing a composition for treating abnormal lipid or cholesterol
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
 CC cardiovascular disease. Furthermore, the compound has gene therapy
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
 CC phosphorothioate backbone throughout and in which all cytidine residues
 CC are 5-methylcytidines.
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1565 TGCTGACTCAGGACGCCA 1584
 Db 20 TACCTGTCCTGTGGTGGCCA 1
 RESULT 1988
 ADH12228
 ID ADH12228 standard; DNA; 20 BP.
 XX AC ADH12228;
 XX 11-MAR-2004 (first entry)
 XX
 DE Human CHD5 PCR primer, SEQ ID NO:50.
 XX
 KW Human; chromodomain helicase DNA-binding 5; CHD5; chromosome 1p36.3;
 KW chromatin structure; chromatin unwinding; DNA repair; DNA recombination;
 KW transcriptional regulation; gene expression; brain; cell cycle control;
 KW development regulation; oncogenesis; cancer; neural development;
 KW neural tissue neoplasia; diagnosis; cancer; neural cancer; neuroblastoma;
 KW breast cancer; colon cancer; liver tumour; germ cell tumour;
 KW drug screening; cytostatic; gene therapy; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX WO2003106650-A2.
 XX 24-DEC-2003.
 XX 16-JUN-2003; 2003WO-US019027.

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XX PR 14-JUN-2002; 2002US-0388848P.
XX PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX PI Brodeur GM, White PS;
XX DR WPI; 2004-082186/08.
XX
XX Novel chromodomain helicase DNA-binding (CHD) proteins, useful as
PT diagnostic and prognostic indicator of tumor, comprises amino terminus
PT having two PHD class zinc finger domains and two chromodomains.
XX
XX Claim 29; SEQ ID NO 50; 124pp; English.
XX
XX The invention relates to human chromodomain, helicase, DNA-binding 5
CC (CHD5; ADH12190) and cDNA encoding it (ADH12179). CHD5 is a novel member
CC of the CHD gene family, members of which have a profound effect on
CC chromatin structure and gene expression and which are thus likely to play
CC an important role in cell cycle control, regulation of development, and
CC oncogenesis. CHD5 comprises two N-terminal zinc finger domains of the PHD
CC (plant homeodomain) class, two chromodomains, a central region which
CC contains a predicted BRAH-box-type helicase domain and a putative SNF2
CC domain, and several nuclear localisation signals. The gene encoding CHD5
CC is located on chromosome 1p36.3, a region frequently deleted in a variety
CC of cancers including neuroblastoma, and the protein is preferentially
CC expressed in brain. CHD5 is therefore thought to be a modulator of normal
CC neural development and neoplasias of neural tissue origin. The invention
CC also relates to vectors and host cells comprising the CHD5 cDNA sequence;
CC an antibody against CHD5; a method of screening for modulators of CHD5
CC activity; a method of diagnosing cancer in a patient, where a reduced
CC level or absence of CHD5 or CHD5 nucleic acids indicates the presence of
CC cancer; treating cancer by administration of CHD5 protein, CHD5-encoding
CC nucleic acids or CHD5 mimetics; and CHD5-specific PCR primers (ADH12186-
CC ADH12247). The methods of the invention are useful in the diagnosis or
CC treatment of cancers such as neural cancers (e.g., neuroblastoma), breast
CC cancer, colon cancer, liver tumours and germ cell tumours. The CHD5
CC protein, CHD5 nucleic acids and anti-CHD5 antibodies are useful as
CC research tools to identify other proteins that are intimately involved in
CC chromatin unwinding, DNA repair and recombination, and transcriptional
CC regulation. Sequences ADH12186-ADH12247 represent specifically claimed
CC human CHD5 PCR primers.
XX
XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 506 AGGGCTACCTGGAGAGCTG 525
Db 1 AGAACACCTGGAGAGCTG 20
RESULT 1989
ADH44477
ID ADH44477 standard; DNA; 20 BP.
XX
XX ADH44477;
AC
XX
XX 25-MAR-2004 (first entry)
DT
XX
XX Extracellular-signal-regulated kinase-6, antisense oligonucleotide #3.
DB
XX
XX Antisense therapy; human; extracellular-signal-regulated kinase-6;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW neurodegenerative disorder; Alzheimer's disease; infection; inflammation;
KW tumour formation; cytostatic; antiinflammatory; neuroprotective;
KW nootropic; antibacterial; phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH
```

```
FT modified_base 1. 20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232772-A1.
PN
XX 18-DEC-2003.
PD
XX 17-JUN-2002; 2002US-00174465.
PF
XX 17-JUN-2002; 2002US-00174465.
PR
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
XX WPI; 2004-052189/05.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT extracellular-signal-regulated kinase-6, useful for modulating expression
PT of extracellular-signal-regulated kinase-6 or treating cancer.
XX
XX Example 15; SEQ ID NO 13; 45pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding extracellular-signal-regulated kinase-6. The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with the nucleic acid and inhibits the expression
CC of extracellular-signal-regulated kinase-6. The antisense oligonucleotide
CC is a chimeric oligonucleotide. The antisense oligonucleotide comprises at
CC least one modified internucleoside linkage, preferably a phosphorothioate
CC linkage. It also comprises at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
CC further comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as hyperproliferative disorders, preferably
CC cancer, inflammatory disorders, and neurodegenerative disorders,
CC preferably Alzheimer's disease. The antisense compound can also be used
CC as prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. The present sequence represents an antisense
CC oligonucleotide used in the examples of the present invention.
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 83 CCCGCGGCTCTGAGGTGCT 102
Db 1 CCACGAGCTCTGAGGTCTCT 20
RESULT 1990
ADH44513/c
ID ADH44513 standard; DNA; 20 BP.
XX
XX ADH44513;
AC
XX
XX 25-MAR-2004 (first entry)
DT
XX
XX Human extracellular-signal-regulated kinase-6 DNA target sequence #2.
KW Antisense therapy; human; extracellular-signal-regulated kinase-6;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW neurodegenerative disorder; Alzheimer's disease; infection; inflammation;
KW tumour formation; cytostatic; antiinflammatory; neuroprotective;
KW nootropic; antibacterial; ds.
XX
XX
```



```

PR 25-SEP-2000; 2000US-00670216.
PA (BUCA/) BUCALA R J.
PA (CHES/) CHESNEY J A.
PA (MITC/) MITCHELL R A.
XX
PI Bucala RJ, Chesney JA, Mitchell RA;
XX
DR WPI; 2004-042217/04.
XX
PT Novel inducible phosphofructokinase isoenzyme polypeptide expressed by
PT cDNA, useful for treating cancer and inflammatory disease.
XX
PS Example 4; SEQ ID NO 1; 32pp; English.
XX
CC The invention relates to novel inducible phosphofructokinase isoenzyme
CC (iPFK-2) polypeptides (preferentially transcribed and translated in
CC tumour cells) and nucleic acid molecules encoding such polypeptides. The
CC invention also provides a cancer malignancy diagnostic assay. The assay
CC involves obtaining a sample of body or tumour fluid or tissue, performing
CC a sequence identity assay to detect the presence of iPFK-2 specific
CC sequences. The invention is useful for treating cancer and inflammatory
CC disease. The present sequence is human antisense oligonucleotide used in
CC the invention.
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
      Query Match      0.8%; Score 13.6; DB 1; Length 20;
      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1679 CCAACTACATCTTCCTCGTCT 1698
Db      ||||| ||||| ||||| |||||
      20 CCAACGGCATCTTCGGGCT 1

RESULT 1993
AD112744/c
ID AD112744 standard; DNA; 20 BP.
AC
AC AD112744;
XX
DT 22-APR-2004 (first entry)
DE
DE Biotin labelled PCR primer used to amplify the human LPIN2 DNA T220A SNP.
XX
KW ss; type 2 diabetes; insulin resistance; human; lipin 2; LPIN2;
KW linkage disequilibrium polymorphism; antidiabetic; gene therapy; PCR;
KW primer; biotin.
XX
OS Homo sapiens.
XX
PN WO2004001071-A2.
XX
PD 31-DEC-2003.
XX
PF 25-JUN-2003; 2003WO-GB002730.
XX
PR 25-JUN-2002; 2002GB-00014682.
XX
PA (OXAG-) OXAGEN LTD.
XX
PI Pullen J, Holdstock J;
XX
DR WPI; 2004-082513/08.
XX
PT Determining whether an individual is predisposed to type 2 diabetes
PT and/or insulin resistance, useful for treating and/or preventing such
PT disease, comprises typing the LPIN2 gene region or LPIN2 protein of the
PT individual.
XX
PS Example 4; Page 41; 152pp; English.
XX

CC This invention relates to a novel method for determining whether an
CC individual is predisposed to type 2 diabetes and/ or insulin resistance.
CC Specifically, it comprises typing the human lipin 2 (LPIN2) gene in order
CC to detect at least one of the four recognised single nucleotide
CC polymorphisms (SNPs) known to be associated with type 2 diabetes and
CC insulin resistance. The present invention further describes detecting or
CC linkage disequilibrium polymorphisms that indicate a susceptibility or
CC genetic predisposition to these conditions. The method comprises
CC contacting a test agent with an LPIN2 mutated polynucleotide or
CC polypeptide and determining whether it is capable of binding and/ or
CC modulating the activity or expression of the molecule. Accordingly, these
CC compositions exhibit antidiabetic activity and can be used to treat type
CC 2 diabetes and/ or insulin resistance using gene therapy. This
CC oligonucleotide sequence is a biotin labelled PCR primer used to amplify
CC a human LPIN2 DNA fragment containing a SNP of the invention.
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
      Query Match      0.8%; Score 13.6; DB 1; Length 20;
      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1227 GGACACAGCTACATTCATCT 1246
Db      ||||| ||||| ||||| |||||
      20 GGATCAGCTACATCTCCTCT 1

RESULT 1994
AD112708/c
ID AD112708 standard; DNA; 20 BP.
XX
AC AD112708;
XX
DT 22-APR-2004 (first entry)
DE
DE Forward PCR primer used to amplify the human LPIN2 DNA exon 5.
XX
KW ss; type 2 diabetes; insulin resistance; human; lipin 2; LPIN2;
KW linkage disequilibrium polymorphism; antidiabetic; gene therapy; PCR;
KW primer.
XX
OS Homo sapiens.
XX
PN WO2004001071-A2.
XX
PD 31-DEC-2003.
XX
PF 25-JUN-2003; 2003WO-GB002730.
XX
PR 25-JUN-2002; 2002GB-00014682.
XX
PA (OXAG-) OXAGEN LTD.
XX
PI Pullen J, Holdstock J;
XX
DR WPI; 2004-082513/08.
XX
PT Determining whether an individual is predisposed to type 2 diabetes
PT and/or insulin resistance, useful for treating and/or preventing such
PT disease, comprises typing the LPIN2 gene region or LPIN2 protein of the
PT individual.
XX
PS Example 1; Page 36; 152pp; English.
XX
CC This invention relates to a novel method for determining whether an
CC individual is predisposed to type 2 diabetes and/ or insulin resistance.
CC Specifically, it comprises typing the human lipin 2 (LPIN2) gene in order
CC to detect at least one of the four recognised single nucleotide
CC polymorphisms (SNPs) known to be associated with type 2 diabetes and
CC insulin resistance. The present invention further describes detecting or
CC linkage disequilibrium polymorphisms that indicate a susceptibility or
CC genetic predisposition to these conditions. The method comprises
CC contacting a test agent with an LPIN2 mutated polynucleotide or

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CC polypeptide and determining whether it is capable of binding and/ or
CC modulating the activity or expression of the molecule. Accordingly, these
CC compositions exhibit antidiabetic activity and can be used to treat type
CC 2 diabetes and/ or insulin resistance using gene therapy. This
CC oligonucleotide sequence is a PCR primer used to amplify human LPIN2 DNA
CC of the invention.

XX
SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1483 CACAACTTCCTGACACTAC 1502
| | | | | | | | | | | | | | | | | | | |
DB 20 CCCAACTACTGATACTAC 1

RESULT 1995
ADI03750/c
ID ADI03750 standard; DNA; 20 BP.
XX
AC ADI03750;
XX
DT 22-APR-2004 (first entry)
XX
DE Human ERMAP gene fragment amplifying primer ev2c.

XX
KW ERMAP; erythroid membrane-associated protein; Scianna antigen; Sc;
KW Radin antigen; Rd; red cell adhesion protein; human; PCR; primer; ss.
XX
OS Homo sapiens.
OS Synthetic.

XX
PN EP1378519-A1.
XX
PD 07-JAN-2004.

XX
PF 05-JUL-2002; 2002EP-00014908.
XX
PR 05-JUL-2002; 2002EP-00014908.
XX
PA (BIOT-) BIOTEST AG.

XX
PI Flegel WA, Wagner FF;
XX
DR WPI; 2004-101299/11.

XX
PT New polynucleotides encoding a human erythroid membrane-associated
PT protein (ERMAP) having at least one mutation compared to a wild type
PT ERMAP, useful for detecting Scianna antigen or determining Scianna
PT antigen type.

XX
PS Disclosure; SEQ ID NO 35; 58pp; English.

XX
CC The invention relates to a polynucleotide (I) encoding human erythroid
CC membrane-associated protein (ERMAP), its fragment or variant, carrying at
CC least one mutation as compared to the nucleotide sequence (SEQ ID NO: 1).
CC The mutation in (I) is a missense mutation causing an amino acid
CC substitution in the extracellular portion of the ERMAP protein,
CC specifically causing an amino acid substitution in position 26, 57 and/or
CC 60 of the amino acid sequence of ERMAP. The mutation may also be a
CC deletion causing a shift in the reading frame of the ERMAP gene, where
CC the mutation occurs in nucleotide position 54, 76, 169, 178, 307 and/or
CC 308. The mutation is a silent mutation in nucleotide position 54 from C
CC to T, or a missense mutation in position 76 from C to T, a G to A in
CC position 169, and/or a C to G in position 178. The mutation may be a
CC deletion of nucleotide position 307 and 308 of the ERMAP gene (SEQ ID NO:
CC 1). The polynucleotide, oligonucleotide, antibody, aptamer or phage is
CC useful for the detection of a Scianna antigen and/or for the
CC determination of the Scianna antigen (Sc) type. The cells from a proband,
CC preferably red blood cells, are useful for a serologic test. The
CC polynucleotide may also be used in the characterisation of monoclonal and

CC polyclonal antibodies for Scianna antigen determination, and for the
CC assessment of affinity, avidity, sensitivity, specificity and/or
CC reactivity of anti-Sc antibodies. Sequences ADI03727-ADI03763 represent
CC PCR primers for amplifying the eleven exon fragments and parts of
CC promoter of the human ERMAP gene.

XX
SQ Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1013 GGGGAGAGCTCAAGCTGGCT 1032
| | | | | | | | | | | | | | | | | | | |
DB 20 GGAGACAGCACACAGCGGGCT 1

RESULT 1996
ADI14022/c
ID ADI14022 standard; DNA; 20 BP.

XX
AC ADI14022;

XX
DT 22-APR-2004 (first entry)

XX
DE Antisense DNA oligo to target human PTP1B DNA SeqID 275.

XX
KW human; ss; antisense; PTP1B; protein phosphatase 1B; PTPN1;
KW phosphorothioate backbone; hyperproliferative condition; cancer;
KW cytostatic; antidiabetic; anorectic; type 2 diabetes; obesity.

XX
OS Homo sapiens.

OS Synthetic.

XX
FH Key Location/Qualifiers

FT modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "OTHER= phosphorothioate backbone"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "OTHER= 2' methoxyethyl nucleotides. All cytidine
FT nucleobases are 5' methylcytidine."

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "OTHER= 2' methoxyethyl nucleotides. All cytidine
FT nucleobases are 5' methylcytidine."

US2003220282-A1.

XX
PD 27-NOV-2003.

XX
PF 07-FEB-2003; 2003US-00360510.

XX
PR 18-JAN-2000; 2000US-00487368.

XX
PR 31-JUL-2000; 2000US-00629644.

XX
PR 14-MAY-2001; 2001US-00854883.

XX
PA (ISIS-) ISIS PHARM INC.

XX
PI Bhanot S, Cowsett LM, Wyatt JR, Monia BP, Butler MM, McKay R;
PI Freier SM;

XX
XX WPI; 2004-051719/05.

XX
DR

XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding PTP1B, useful for treating a disease/condition
PT associated with PTP1B, such as cancer, diabetes or obesity.

XX
PS Claim 3; SEQ ID NO 275; 143pp; English.

XX
XX

CC This invention relates to novel compositions and methods for modulating
CC the expression of PTP1B (also known as protein phosphatase 1B and PTPN1).
CC Specifically, it refers to antisense compounds that can target and
CC hybridize with a nucleic acid molecule encoding PTP1B, as well as splice
CC variants thereof and inhibit expression accordingly. PTP1B is a tyrosine
CC phosphatase that plays an essential regulatory role in signalling
CC mediated by the insulin receptor and as such is useful for treating
CC diseases such as type 2 diabetes and obesity. Furthermore, PTP1B can
CC suppress transformation of oncogenic genes, such that compositions of
CC this invention can also be used to treat hyperproliferative conditions
CC including cancer. Accordingly, these compounds can be described as having
CC cytostatic, antidiabetic and anorectic activities. This oligonucleotide
CC sequence is an antisense DNA oligo that targets human PTP1B DNA, and
CC which has a phosphorothioate backbone and 2'-O-methoxyethyl wings, used
CC in an exemplification of the invention.

XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 727 GAGGGGACCTGCACCGC 746
||| | ||||| ||
DB 20 GAGGTGTCACCTGCAGAGC 1

RESULT 1997
ADI30027/C
ID ADI30027 standard; DNA; 20 BP.
XX
AC ADI30027;
XX
DT 22-APR-2004 (first entry)
XX
DE Human dual specific phosphatase 4 DNA, antisense oligonucleotide #47.
XX
KW Antisense therapy; human; dual specific phosphatase 4;
KW hyperproliferative disorder; developmental disorder; apoptosis;
KW cytostatic; phosphorothioate; ss.
XX
OS Homo sapiens.

Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"

XX US2003232441-A1.
PN
XX
XX 18-DEC-2003.
PD
XX
XX 17-JUN-2002; 2002US-00174460.
PF
XX
XX 17-JUN-2002; 2002US-00174460.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Monia BP, Bennett CF, Dobie KW;
PI
XX
XX WPI; 2004-061286/06.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding dual specific phosphatase 4, useful for treating
XX cancer, developmental disorder or a condition arising from aberrant
XX apoptosis.
XX
XX Example 15; SEQ ID NO 60; 61pp; English.

CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding dual specific phosphatase 4. The antisense compound
CC comprises an antisense oligonucleotide that specifically hybridises with
CC the nucleic acid and inhibits the expression of dual specific phosphatase
CC 4. The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, developmental disorders, and diseases
CC associated with aberrant apoptosis. The present sequence represents an
CC antisense oligonucleotide used in the examples of the present invention.

XX Sequence 20 BP; 5 A; 9 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1166 TGGGCTGCATCTTCATGAG 1185
||| | ||||| ||
DB 20 TGGGCTGCAGCTCCTGTGGG 1

RESULT 1998
ADI30069
ID ADI30069 standard; DNA; 20 BP.
XX
AC ADI30069;
XX
DT 22-APR-2004 (first entry)
XX
DE Human dual specific phosphatase 4 DNA target sequence #17.
XX
KW Antisense therapy; human; dual specific phosphatase 4;
KW hyperproliferative disorder; developmental disorder; apoptosis;
KW cytostatic; ds.
XX
OS Homo sapiens.

XX US2003232441-A1.
PN
XX
XX 18-DEC-2003.
PD
XX
XX 17-JUN-2002; 2002US-00174460.
PF
XX
XX 17-JUN-2002; 2002US-00174460.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Monia BP, Bennett CF, Dobie KW;
PI
XX
XX WPI; 2004-061286/06.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding dual specific phosphatase 4, useful for treating
XX cancer, developmental disorder or a condition arising from aberrant
XX apoptosis.

XX Example 15; SEQ ID NO 102; 61pp; English.
PS
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding dual specific phosphatase 4. The antisense compound
XX comprises an antisense oligonucleotide that specifically hybridises with
XX the nucleic acid and inhibits the expression of dual specific phosphatase
XX 4. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense

CC oligonucleotides are useful for the treatment of diseases such as
 CC hyperproliferative disorders, developmental disorders, and diseases
 CC associated with aberrant apoptosis. The present sequence represents a
 CC human dual specific phosphatase 4 DNA target sequence for an antisense
 CC oligonucleotide.
 CC
 XX SQ Sequence 20 BP; 1 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
 CC
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 CC
 QY 1166 TGGGCTGCATCTCTATGAG 1185
 DB 1 TGGGCTGCACCTCTCTGGG 20
 CC
 RESULT 1999
 ADJ32721/c
 ID ADJ32721 standard; DNA; 20 BP.
 XX
 AC ADJ32721;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human GPCR 39 specific antisense oligo, ISIS 155246.
 XX
 KW G protein-coupled receptor; GPCR; research tool;
 KW hyperproliferative disorder; cancer; neurological disorder; prophylaxis;
 KW infection; inflammation; tumour; antisense gene therapy; human;
 KW antisense; phosphorothioate backbone; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 Key Location/Qualifiers
 FT modified_base 1..20 /*tag= b
 FT /*mod_base= OTHER
 FT /note= "Phosphorothioate backbone in which all cytidines
 FT are 5-methyl cytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /*mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /*tag= c
 FT /*mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 XX
 PN US2003232769-A1.
 XX
 PD 18-DEC-2003.
 XX
 PF 17-JUN-2002; 2002US-00173902.
 XX
 PR 17-JUN-2002; 2002US-00173902.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Dobie KW;
 XX
 DR WPI; 2004-061308/06.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding G
 FT protein-coupled receptor 39, useful for modulating expression of G
 FT protein-coupled receptor 39 or treating hyperproliferative or
 FT neurological disorder.
 XX
 PS Example 15; SEQ ID NO 43; 46pp; English.
 XX
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of G protein-coupled receptor (GPCR) 39.

CC The antisense oligonucleotide is useful in modulating the function of
 CC nucleic acid molecules encoding GPCR 39. It is also used as research
 CC tools and diagnostics and is used as tools in differential and/or
 CC combinatorial analyses to elucidate expression patterns of a portion or
 CC the entire complement of genes expressed within cells and tissues. The
 CC antisense compound is used for treating diseases or conditions associated
 CC with GPCR 39, preferably hyperproliferative disorder, e.g. cancer or a
 CC neurological disorder. It is also used as prophylaxis, e.g. to prevent or
 CC delay infection, inflammation or tumour formation. The antisense
 CC oligonucleotide is useful in antisense gene therapy. The present sequence
 CC is an antisense oligonucleotide targeted towards human GPCR 39. This
 CC sequence is used to illustrate the method of the invention.
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
 CC
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 CC
 QY 926 TCCAGCTGCTCCGTGGCGCTG 945
 DB 20 TCCAGCTACACCTGCTCTG 1
 CC
 RESULT 2000
 ADJ32749
 ID ADJ32749 standard; DNA; 20 BP.
 XX
 AC ADJ32749;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human GPCR 39 target region #24.
 XX
 KW G protein-coupled receptor; GPCR; research tool;
 KW hyperproliferative disorder; cancer; neurological disorder; prophylaxis;
 KW infection; inflammation; tumour; antisense gene therapy; human; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2003232769-A1.
 XX
 PD 18-DEC-2003.
 XX
 PF 17-JUN-2002; 2002US-00173902.
 XX
 PR 17-JUN-2002; 2002US-00173902.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Dobie KW;
 XX
 DR WPI; 2004-061308/06.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding G
 FT protein-coupled receptor 39, useful for modulating expression of G
 FT protein-coupled receptor 39 or treating hyperproliferative or
 FT neurological disorder.
 XX
 PS Example 15; SEQ ID NO 71; 46pp; English.
 XX
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of G protein-coupled receptor (GPCR) 39.
 CC The antisense oligonucleotide is useful in modulating the function of
 CC nucleic acid molecules encoding GPCR 39. It is also used as research
 CC tools and diagnostics and is used as tools in differential and/or
 CC combinatorial analyses to elucidate expression patterns of a portion or
 CC the entire complement of genes expressed within cells and tissues. The
 CC antisense compound is used for treating diseases or conditions associated
 CC with GPCR 39, preferably hyperproliferative disorder, e.g. cancer or a
 CC neurological disorder. It is also used as prophylaxis, e.g. to prevent or
 CC delay infection, inflammation or tumour formation. The antisense
 CC oligonucleotide is useful in antisense gene therapy. The present sequence

CC is human GPCR 39 target region. This sequence is used to illustrate the
 CC method of the invention.

SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 926 TCCAGCTGCTCCGTGGCCTG 945

Db 1 TCCAGCTACACCTGCTCTG 20

RESULT 2001

AD119194/c

ID AD119194 standard; DNA; 20 BP.

XX AC AD119194;

XX DT 22-APR-2004 (first entry)

XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #48.

XX KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

FT /*tag= c

FT /mod_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

PN US2003225256-A1.

XX PD 04-DEC-2003.

XX PF 31-MAY-2002; 2002US-00160787.

XX PR 31-MAY-2002; 2002US-00160787.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Watt AT;

XX DR WPI; 2004-022085/02.

PT New antisense oligonucleotide, having a sequence targeted to a nucleic
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
 PT composition for treating neurological disorders.

PS Claim 1; SEQ ID NO 61; 58pp; English.

XX The invention describes a new antisense oligonucleotide, having a
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
 CC protein kinase 2, that specifically hybridises with the nucleic acid
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
 CC The antisense oligonucleotide is useful for preparing a composition for
 CC treating e.g., neurological disorders. This sequence represents a human
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.

XX SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 13.6; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1072 ACATACTCCATGAGGTGGT 1091

Db 20 ACCTACTCAATGAAGTTGT 1

RESULT 2002

AD119238

ID AD119238 standard; DNA; 20 BP.

XX AC AD119238;

XX DT 22-APR-2004 (first entry)

XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #92.

XX KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

FT modified_base 15..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

PN US2003225256-A1.

XX PD 04-DEC-2003.

XX PF 31-MAY-2002; 2002US-00160787.

XX PR 31-MAY-2002; 2002US-00160787.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Watt AT;

XX DR WPI; 2004-022085/02.

PT New antisense oligonucleotide, having a sequence targeted to a nucleic
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
 PT composition for treating neurological disorders.

PS Example 15; SEQ ID NO 105; 58pp; English.

XX The invention describes a new antisense oligonucleotide, having a
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
 CC protein kinase 2, that specifically hybridises with the nucleic acid
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
 CC The antisense oligonucleotide is useful for preparing a composition for
 CC treating e.g., neurological disorders. This sequence represents a human
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.

XX SQ Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

RESULT 2004
AD119187/c
ID ADI19187 standard; DNA; 20 BP.

XX AC
XX ADI19187;
XX
XX 22-APR-2004 (first entry)
XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #41.
XX DE gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT FT are 5-methylcytidines"
FT FT 1..5
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT FT 15..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2003225256-A1.
XX PN
XX PD 04-DEC-2003.
XX PF 31-MAY-2002; 2002US-00160787.
XX PR 31-MAY-2002; 2002US-00160787.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Watt AT;
XX WPI; 2004-022085/02.
XX DR
XX PT New antisense oligonucleotide, having a sequence targeted to a nucleic
FT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX Claim 1; SEQ ID NO 54; 58pp; English.
XX PS
XX CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps

QY 692 TTGTGGCACTCAAGGATC 711
| | | | | | | | | |
DB 20 TGGTGCATTAAAGATC 1

RESULT 2005
ADI19242

347 AGATGGGTCGTGATGGGGAG 366
| | | | | | | | | | | | | |
Db 1 AAATGGGATCAGATGGTGAG 20

RESULT 2003
ADI19169/C
AD119169 standard; DNA; 20 BP.
XX AC
XX AC
XX ADI19169;
XX 22-APR-2004 (first entry)
XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #23.
DE gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX neurological disorder; human; PCTAIRE protein kinase 2; ss.
KW KW
XX Homo sapiens.
OS XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /*note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /*note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PN PN
XX US2003225256-A1.
XX 04-DEC-2003.
PD PD
XX 31-MAY-2002; 2002US-00160787.
XX 31-MAY-2002; 2002US-00160787.
PR PR
XX (ISIS-) ISIS PHARM INC.
PA PA
XX Watt AT;
PI PI
XX WPI; 2004-022085/02.
DR DR
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX Claim 1; SEQ ID NO 36; 58pp; English.
PS PS
XX The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX Sequence 20 BP; 4 A; 8 C; 1 G; 7 T; 0 U; 0 Other;
SQ SQ

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 347 AGATGGGTCGTGATGGGGAG 366
DP 20 AAATGGGATCAGATGGTGAG 1
| | | | | | | | | | | | | |

ID XX AD119242 standard; DNA; 20 BP.
AC XX AD119242;
DT XX 22-APR-2004 (first entry)
XX XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #96.
DE XX gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX XX Homo sapiens.
OS XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
acid encoding PCTAIRE protein kinase 2, useful for preparing a
composition for treating neurological disorders.
XX
PS Example 15; SEQ ID NO 109; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
protein kinase 2, that specifically hybridises with the nucleic acid
encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
treating e.g., neurological disorders. This sequence represents a human
PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 388 TCCTCGGATGAGGTGCAGTC 407
DB 1 TCATCTGATGAAGTCCAGTC 20
RESULT 2006
AD119268
ID AD119268 standard; DNA; 20 BP.
XX
AC AD119268;
XX

DT XX 22-APR-2004 (first entry)
XX XX Human PCTAIRE protein kinase 2 antisense oligonucleotide #122.
DE XX gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX XX Homo sapiens.
OS XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
acid encoding PCTAIRE protein kinase 2, useful for preparing a
composition for treating neurological disorders.
XX
PS Example 15; SEQ ID NO 135; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
protein kinase 2, that specifically hybridises with the nucleic acid
encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
treating e.g., neurological disorders. This sequence represents a human
PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1517 TAAAGGAGATTGAGTCAAA 1536
DB 1 TGAAGAGATTGAGTTGCAA 20
RESULT 2007
AD119173/C
ID AD119173 standard; DNA; 20 BP.
XX
AC AD119173;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #27.
XX

KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
 OS Homo sapiens.

XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 XX US2003225256-A1.
 PN 04-DEC-2003.
 XX 31-MAY-2002; 2002US-00160787.
 XX 31-MAY-2002; 2002US-00160787.
 XX (ISIS-) ISIS PHARM INC.
 PA Watt AT;
 XX WPI; 2004-022085/02.
 XX New antisense oligonucleotide, having a sequence targeted to a nucleic
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
 PT composition for treating neurological disorders.
 XX Claim 1; SEQ ID NO 40; 58pp; English.
 XX The invention describes a new antisense oligonucleotide, having a
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
 CC protein kinase 2, that specifically hybridises with the nucleic acid
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
 CC The antisense oligonucleotide is useful for preparing a composition for
 CC treating e.g., neurological disorders. This sequence represents a human
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.
 XX Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGTC 407
 |||||
 DB 20 TCATCTGATGAGTCCAGTC 1

RESULT 2008
 ADI19212/c
 ID ADI19212 standard; DNA; 20 BP.
 XX AC ADI19212;
 XX 22-APR-2004 (first entry)
 DT Human PCTAIRE protein kinase 2 antisense oligonucleotide #66.
 DE gene therapy; antisense technology; PCTAIRE protein kinase 2;
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
 XX OS Homo sapiens.

XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 XX US2003225256-A1.
 PN 04-DEC-2003.
 XX 31-MAY-2002; 2002US-00160787.
 XX 31-MAY-2002; 2002US-00160787.
 XX (ISIS-) ISIS PHARM INC.
 PA Watt AT;
 XX WPI; 2004-022085/02.
 XX New antisense oligonucleotide, having a sequence targeted to a nucleic
 PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
 PT composition for treating neurological disorders.
 XX Claim 1; SEQ ID NO 79; 58pp; English.
 XX The invention describes a new antisense oligonucleotide, having a
 CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
 CC protein kinase 2, that specifically hybridises with the nucleic acid
 CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
 CC The antisense oligonucleotide is useful for preparing a composition for
 CC treating e.g., neurological disorders. This sequence represents a human
 CC PCTAIRE protein kinase 2 antisense oligonucleotide.
 XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1517 TAAAGGAGATTCAGTACAA 1536
 |||||
 DB 20 TGAAGAGATTCAGTTGCAA 1

RESULT 2009
 ADI19256
 ID ADI19256 standard; DNA; 20 BP.
 XX AC ADI19256;
 XX 22-APR-2004 (first entry)
 DT Human PCTAIRE protein kinase 2 antisense oligonucleotide #110.
 DE gene therapy; antisense technology; PCTAIRE protein kinase 2;
 KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
 XX OS Homo sapiens.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b


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FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FN US2003225256-A1.
XX
XX PD 04-DEC-2003.
XX
XX PF 31-MAY-2002; 2002US-00160787.
XX
XX PR 31-MAY-2002; 2002US-00160787.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Watt AT;
XX
XX DR WPI; 2004-022085/02.
XX
XX PT New antisense oligonucleotide, having a sequence targeted to a nucleic
XX acid encoding PCTAIRE protein kinase 2, useful for preparing a
XX composition for treating neurological disorders.
XX
XX PS Example 15; SEQ ID NO 123; 58pp; English.
XX
XX CC The invention describes a new antisense oligonucleotide, having a
XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
XX protein kinase 2, that specifically hybridises with the nucleic acid
XX encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX The antisense oligonucleotide is useful for preparing a composition for
XX treating e.g., neurological disorders. This sequence represents a human
XX PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX SQ Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1072 ACATCTCCATGAGGTGGT 1091
Db 1 ACCTACTCAATGAAGTTGT 20
XX
RESULT 2010
AD119184/c
ID AD119184 standard; DNA; 20 BP.
XX
XX AC AD119184;
XX
XX DE 22-APR-2004 (first entry)
XX
XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #38.
XX
XX KW Gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 1..5
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FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FN US2003225256-A1.
XX
XX PD 04-DEC-2003.
XX
XX PF 31-MAY-2002; 2002US-00160787.
XX
XX PR 31-MAY-2002; 2002US-00160787.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Watt AT;
XX
XX DR WPI; 2004-022085/02.
XX
XX PT New antisense oligonucleotide, having a sequence targeted to a nucleic
XX acid encoding PCTAIRE protein kinase 2, useful for preparing a
XX composition for treating neurological disorders.
XX
XX PS Example 15; SEQ ID NO 51; 58pp; English.
XX
XX CC The invention describes a new antisense oligonucleotide, having a
XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
XX protein kinase 2, that specifically hybridises with the nucleic acid
XX encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX The antisense oligonucleotide is useful for preparing a composition for
XX treating e.g., neurological disorders. This sequence represents a human
XX PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 608 TGGAGACCTACATTAAGCTG 627
Db 20 TGGAAACCTACATCAATTG 1
XX
RESULT 2011
AD119186
ID AD119186 standard; DNA; 20 BP.
XX
XX AC AD119186;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #40.
XX
XX KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15..20
```

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FT      /*tag= c
FT      /mod_base= OTHER
XX      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX
XX      US2003225256-A1.
XX
XX      04-DEC-2003.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Matt AT;
XX
XX      WPI; 2004-022085/02.
XX
XX      New antisense oligonucleotide, having a sequence targeted to a nucleic
XX      acid encoding PCTAIRE protein kinase 2, useful for preparing a
XX      composition for treating neurological disorders.
XX
XX      Example 15; SEQ ID NO 53; 58pp; English.
XX
XX      The invention describes a new antisense oligonucleotide, having a
XX      sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
XX      protein kinase 2, that specifically hybridises with the nucleic acid
XX      encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX      The antisense oligonucleotide is useful for preparing a composition for
XX      treating e.g., neurological disorders. This sequence represents a human
XX      PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX      Sequence 20 BP; 4 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY      1390 CTCACCAAGCTGTTCAGTT 1409
DB      1 CTCCTCAAGCTTTTCCAATT 20
XX
XX
XX      RESULT 2012
XX      ADI19197/c
XX      ID      ADI19197 standard; DNA; 20 BP.
XX
XX      AC      ADI19197;
XX
XX      DT      22-APR-2004 (first entry)
XX
XX      DE      Human PCTAIRE protein kinase 2 antisense oligonucleotide #51.
XX
XX      KW      gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX      KW      neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX      OS      Homo sapiens.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..20
XX      /tag= b
XX      /mod_base= OTHER
XX      /note= "OTHER= Phosphorothioate backbone. All cytidines
XX      are 5-methylcytidines"
XX      modified_base 1..5
XX      /tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX      modified_base 15..20
XX      /tag= c
XX      /mod_base= OTHER
XX      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX      US2003225256-A1.
XX      04-DEC-2003.
XX
```

```
PN      US2003225256-A1.
XX
XX      04-DEC-2003.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      31-MAY-2002; 2002US-00160787.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Matt AT;
XX
XX      WPI; 2004-022085/02.
XX
XX      New antisense oligonucleotide, having a sequence targeted to a nucleic
XX      acid encoding PCTAIRE protein kinase 2, useful for preparing a
XX      composition for treating neurological disorders.
XX
XX      Example 15; SEQ ID NO 64; 58pp; English.
XX
XX      The invention describes a new antisense oligonucleotide, having a
XX      sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
XX      protein kinase 2, that specifically hybridises with the nucleic acid
XX      encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX      The antisense oligonucleotide is useful for preparing a composition for
XX      treating e.g., neurological disorders. This sequence represents a human
XX      PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
XX      Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 13.6; DB 1; Length 20;
XX      Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX      Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY      1134 GGACTACTCCATCAGATTG 1153
DB      20 GGAGTACTTAAACACAGATTG 1
XX
XX
XX      RESULT 2013
XX      ADI19263
XX      ID      ADI19263 standard; DNA; 20 BP.
XX
XX      AC      ADI19263;
XX
XX      DT      22-APR-2004 (first entry)
XX
XX      DE      Human PCTAIRE protein kinase 2 antisense oligonucleotide #117.
XX
XX      KW      gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX      KW      neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
XX      OS      Homo sapiens.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..20
XX      /tag= b
XX      /mod_base= OTHER
XX      /note= "OTHER= Phosphorothioate backbone. All cytidines
XX      are 5-methylcytidines"
XX      modified_base 1..5
XX      /tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX      modified_base 15..20
XX      /tag= c
XX      /mod_base= OTHER
XX      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX      US2003225256-A1.
XX      04-DEC-2003.
XX
```

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PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Example 15; SEQ ID NO 130; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 6 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1306 TTCAGACATACAACTACCC 1325
Db 1 TTCAAGAACTACAACTTCC 20

RESULT 2014
ADI19203/C
ID ADI19203 standard; DNA; 20 BP.
XX
AC ADI19203;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #57.
XX
KW Gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
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PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Claim 1; SEQ ID NO 70; 59pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 6 A; 1 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1306 TTCAGACATACAACTACCC 1325
Db 20 TTCAAGAACTACAACTTCC 1

RESULT 2015
ADI19250
ID ADI19250 standard; DNA; 20 BP.
XX
AC ADI19250;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #104.
XX
KW Gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
PI Watt AT;
XX
```

DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
XX Example 15; SEQ ID NO 117; 58pp; English.
PS
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g.; neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 692 TTGTGGCACTCAAGGAGATC 711
Db 1 TGGTGGCATTAAAGAGATC 20
RESULT 2016
ADJ32620
ID ADJ32620 standard; DNA; 20 BP.
XX
AC ADJ32620;
XX
XX 22-APR-2004 (first entry)
DT
XX Human ERK-6 specific antisense oligo, ISIS 157013.
DE
XX Extracellular-signal-regulated kinase-6; ERK-6;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW neurodegenerative disorder; Alzheimer's disease; angiogenesis;
KW tubular formation; matrix degradation; human; antisense;
KW phosphorothioate backbone; therapy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone in which all cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
XX US2003232778-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JAN-2003; 2003US-00348431.
XX
XX 17-JUN-2002; 2002US-00174465.
XX
XX (MARC/) MARCUSOON E G.
PA (BENN/) BENNETT C F.
PA (DOBI/) DOBIE K W.
XX

PI Marcussoon EG, Bennett CF, Dobie KW;
XX WPI; 2004-061312/06.
XX
XX New compound targeted to a nucleic acid molecule encoding extracellular-
PT signal-regulated kinase-6, useful for treating angiogenic,
PT hyperproliferative (cancer), inflammatory or neurodegenerative disorders
PT (Alzheimer's disease).
XX
XX Example 15; SEQ ID NO 13; 47pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of extracellular-signal-regulated kinase-6
CC (ERK-6). The compound is useful in treating an animal having a disease or
CC condition associated with ERK-6, e.g. a hyperproliferative disorder
CC (especially cancer), an inflammatory disorder or a neurodegenerative
CC disorder (especially Alzheimer's disease). It is also useful for
CC inhibiting angiogenesis, for preventing tubular formation of blood
CC vessels, and for preventing degradation of extracellular matrix for new
CC blood vessel formation. The present sequence is an antisense
CC oligonucleotide targetted towards human ERK-6 DNA. This sequence is used
CC to illustrate the method of the invention.
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 83 CCCGGCGCTCTGAGTTGCT 102
Db 1 CCACGAGCTCTGAGTTTCT 20
RESULT 2017
ADJ32656/c
ID ADJ32656 standard; DNA; 20 BP.
XX
XX AC ADJ32656;
XX
XX 22-APR-2004 (first entry)
DT
XX Human ERK-6 target DNA fragment #2.
DE
XX Extracellular-signal-regulated kinase-6; ERK-6;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW neurodegenerative disorder; Alzheimer's disease; angiogenesis;
KW tubular formation; matrix degradation; human; therapy; ds.
XX
XX Homo sapiens.
OS
XX US2003232778-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JAN-2003; 2003US-00348431.
XX
XX 17-JUN-2002; 2002US-00174465.
XX
XX (MARC/) MARCUSOON E G.
PA (BENN/) BENNETT C F.
PA (DOBI/) DOBIE K W.
XX
XX Marcussoon EG, Bennett CF, Dobie KW;
XX WPI; 2004-061312/06.
XX
XX New compound targeted to a nucleic acid molecule encoding extracellular-
PT signal-regulated kinase-6, useful for treating angiogenic,
PT hyperproliferative (cancer), inflammatory or neurodegenerative disorders
PT (Alzheimer's disease).
XX
XX Example 15; SEQ ID NO 49; 47pp; English.
PS

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of extracellular-signal-regulated kinase-6
CC (ERK-6). The compound is useful in treating an animal having a disease or
CC condition associated with ERK-6, e.g. a hyperproliferative disorder
CC (especially cancer), an inflammatory disorder or a neurodegenerative
CC disorder (especially Alzheimer's disease). It is also useful for
CC inhibiting angiogenesis, for preventing tubular formation of blood
CC vessels, and for preventing degradation of extracellular matrix for new
CC blood vessel formation. The present sequence is human ERK-6 target DNA
CC fragment. This sequence is used to illustrate the method of the
CC invention.
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 83 CCGCGGCTCTGAGTTGCT 102
||| ||||| ||||| |||||
Db 20 CCACGAGCTCTGAGTTTCT 1

RESULT 2018
ADH80324
ID ADH80324 standard; DNA; 20 BP.
XX
AC ADH80324;
XX
XX
DT 06-MAY-2004 (first entry)
XX
DE MAC2-BP PCR primer, SEQ ID 48.
XX
KW Cytostatic; human; senescence; tumour; PCR; primer; ss; MAC2-BP.
XX
OS Homo sapiens.
XX
PN WO2004005462-A2.
XX
XX
PD 15-JAN-2004.
XX
PF 27-JUN-2003; 2003WO-US020425.
XX
XX
PR 03-JUL-2002; 2002US-0394121P.
XX
PA (UNII) UNIV ILLINOIS FOUND.
XX
PI Roninson IB, Chang B;
XX
DR WPI; 2004-091347/09.
XX

Identifying compounds that induce senescence in mammalian cells, useful
PT for treating e.g. cancer, comprises assaying the expression of cellular
PT genes in the cell in the presence and absence of the compound.
XX
PS Example 4; SEQ ID NO 48; 102pp; English.
XX

The present invention relates to a method for identifying a compound that
CC induces senescence in a mammalian cell. The method comprises assaying the
CC expression of cellular genes in the cell in the presence and absence of
CC the compound. The method is useful for identifying and modulating
CC expression of tumour senescence genes. These may be used in treating
CC diseases or conditions related to abnormal cell proliferation or
CC neoplastic cell growth, in assessing the efficacy of the treatment of the
CC disease or condition, or in identifying compounds that induce senescence
CC in mammalian cells or that inhibit senescence-associated induction of
CC cellular gene expression. PCR primers ADH80277-ADH80400 were used to
CC amplify genes that are up- or downregulated in doxorubicin-induced
CC accelerated senescence to identify senescence-inducing compounds.
XX
SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGAGTCTGA 67
||| ||||| ||||| |||||
Db 1 ACCATGAGTGTGGATGCTGA 20

RESULT 2019
ADK96009/c
ID ADK96009 standard; DNA; 20 BP.
XX
AC ADK96009;
XX
DT 06-MAY-2004 (first entry)
XX
DE Primer of the invention #1729.
XX
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS Synthetic.
XX
PN JP2003259875-A.
XX
PD 16-SEP-2003.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2004-093977/10.
XX

Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 5038; 2627pp; Japanese.
XX

The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 213 GATAGGCTGGATGAGAGTG 232
||| ||||| ||||| |||||
Db 20 GAGTGGCTGGATGACAATG 1

RESULT 2020
ADK95547
ID ADK95547 standard; DNA; 20 BP.
XX
AC ADK95547;
XX
DT 06-MAY-2004 (first entry)
XX
DE Primer of the invention #1267.
XX
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS Synthetic.
XX
PN JP2003259875-A.

```
XX 16-SEP-2003.
PD
XX
XX 08-MAR-2002; 2002JP-00064373.
PF
XX
XX 08-MAR-2002; 2002JP-00064373.
PR
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
PA
XX
XX WPI; 2004-093977/10.
DR
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 4576; 2627pp; Japanese.
PS
XX
XX The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 948 CTACTGCCACCGCAGAGG 967
DB 1 CTGTCGCCACCTGCAGTAG 20
RESULT 2021
ADK96655
ID ADK96655 standard; DNA; 20 BP.
XX
AC ADK96655;
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Primer of the invention #2375.
DE
XX
XX human; single nucleotide polymorphism; SNP; ss; primer.
KW
XX
XX Synthetic.
OS
XX
XX JP2003259875-A.
PN
XX
XX 16-SEP-2003.
PD
XX
XX 08-MAR-2002; 2002JP-00064373.
PF
XX
XX 08-MAR-2002; 2002JP-00064373.
PR
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
PA
XX
XX WPI; 2004-093977/10.
DR
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 5684; 2627pp; Japanese.
PS
XX
XX The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
SQ
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```
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 989 CCCAGAACCTGCTCATCAAC 1008
DB 1 CTCAGAGCCTGCTCTTCAGC 20
RESULT 2022
ADK95801
ID ADK95801 standard; DNA; 20 BP.
XX
AC ADK95801;
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Primer of the invention #1521.
DE
XX
XX human; single nucleotide polymorphism; SNP; ss; primer.
KW
XX
XX Synthetic.
OS
XX
XX JP2003259875-A.
PN
XX
XX 16-SEP-2003.
PD
XX
XX 08-MAR-2002; 2002JP-00064373.
PF
XX
XX 08-MAR-2002; 2002JP-00064373.
PR
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
PA
XX
XX WPI; 2004-093977/10.
DR
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 4830; 2627pp; Japanese.
PS
XX
XX The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 0 A; 12 C; 0 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1698 TTACTCTCTGCTTACCTGCC 1717
DB 1 TTCTCTCTTCTCTCCCTCCC 20
RESULT 2023
ADJ61350
ID ADJ61350 standard; DNA; 20 BP.
XX
AC ADJ61350;
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Oligonucleotide associated to IL5R-X61176 #42.
DE
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW
```

KW ss.
 OS Homo sapiens.
 XX WO2004011613-A2.
 PN 05-FEB-2004.
 XX 25-JUL-2003; 2003WO-US023509.
 PF 29-JUL-2002; 2002US-0399076P.
 XX (EPIC-) EPIGENESIS PHARM INC.
 XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-203534/19.
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 FT CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX Claim 2; SEQ ID NO 2206; 85pp; English.
 PS The present invention relates to an oligonucleotide anti-sense to e.g.,
 XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1444 ATGAACATCCATTCTTCTCT 1463
 Db 1 ATGCAAAATGCTTTCTTCTCT 20
 RESULT 2024
 ADJ45364
 ID ADJ45364 standard; DNA; 20 BP.
 XX ADJ45364;
 AC 06-MAY-2004 (first entry)
 XX Hepatoma-derived growth factor antisense oligo seqid 134.
 DE cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
 KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
 KW human; ss; antisense oligonucleotide.
 XX Homo sapiens.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b

FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 XX US2004023379-A1.
 PN 05-FEB-2004.
 PD 31-JUL-2002; 2002US-00210429.
 XX 31-JUL-2002; 2002US-00210429.
 PR (ISIS-) ISIS PHARM INC.
 XX Bennett CF, Dobie KW;
 PI WPI; 2004-142660/14.
 XX New compound, particularly an antisense oligonucleotide targeted to a
 PT nucleic acid encoding a hepatoma-derived growth factor, useful for
 PT treating a hyperproliferative disorder e.g. cancer, or a metabolic
 PT disorder.
 XX Example 15; SEQ ID NO 134; 61pp; English.
 PS The invention describes a compound 8-80 nucleobases in length targeted
 XX to, and which specifically hybridises with a nucleic acid molecule
 CC encoding hepatoma-derived growth factor, and inhibits the expression of
 CC hepatoma-derived growth factor. The compound, composition and methods are
 CC useful for treating a disease or condition associated with hepatoma-
 CC derived growth factor, such as a metabolic disorder, or a
 CC hyperproliferative disorder, e.g. cancer, which is selected from
 CC hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
 CC useful in research and diagnostics for modulating the expression of
 CC hepatoma-derived growth factor. This sequence represents a human hepatoma
 CC -derived growth factor antisense oligonucleotide.
 XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1081 AATGAGGTGGTGACACTGTG 1100
 Db 1 AATGAGTTGAGGCCACTGTG 20
 RESULT 2025
 ADJ45293/C
 ID ADJ45293 standard; DNA; 20 BP.
 XX ADJ45293;
 AC 06-MAY-2004 (first entry)
 XX Hepatoma-derived growth factor antisense oligo seqid 63.
 DE cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
 KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
 KW human; ss; antisense oligonucleotide.
 XX Homo sapiens.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b

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FT modified_base 1. .20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1. .5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004023379-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX 31-JUL-2002; 2002US-00210429.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
XX
XX WPI; 2004-142660/14.
XX
XX New compound, particularly an antisense oligonucleotide targeted to a
XX nucleic acid encoding a hepatoma-derived growth factor, useful for
XX treating a hyperproliferative disorder e.g. cancer, or a metabolic
XX disorder.
XX
XX Example 15; SEQ ID NO 63; 61pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding hepatoma-derived growth factor, and inhibits the expression of
XX hepatoma-derived growth factor. The compound, composition and methods are
XX useful for treating a disease or condition associated with hepatoma-
XX derived growth factor, such as a metabolic disorder, or a
XX hyperproliferative disorder, e.g. cancer, which is selected from
XX hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX useful in research and diagnostics for modulating the expression of
XX hepatoma-derived growth factor. This sequence represents a human hepatoma
XX -derived growth factor antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 1081 AATGAGGTGGTGCACACTGTG 1100
XX ||||| ||| |||||
XX 20 AATGAGTTGAGCCACTGTG 1
XX
RESULT 2026
ADJ38711/c
ID ADJ38711 standard; DNA; 20 BP.
XX
XX AC ADJ38711;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 100.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
XX resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
```

```
OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1. .20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX modified_base 1. .5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15. .20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004023383-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 100; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 14 AAGATGGACAGGAATGCAG 33
XX ||||| ||| |||||
XX 20 AAGATAGACTGGACAGCAG 1
XX
RESULT 2027
ADJ38770
ID ADJ38770 standard; DNA; 20 BP.
XX
XX AC ADJ38770;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 159.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
XX resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
```



```

XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX PN US2004023393-A1.
XX
XX PD 05-FEB-2004.
XX
XX PF 31-JUL-2002; 2002US-00210833.
XX
XX PR 31-JUL-2002; 2002US-00210833.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 159; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 14 AAGGATGGACAGGATGCAG 33
XX ||||| ||| ||| |||
XX Db 1 AAGGATAGACTGGACAGCAG 20
XX
XX RESULT 2028
XX ADJ62144
XX ID ADJ62144 standard; DNA; 20 BP.
XX
XX AC ADJ62144;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Human EDG1 antisense oligonucleotide ISIS126603.
XX
XX KW Human; ss; antisense gene therapy; endothelial differentiation gene 1;
XX EDG1; G protein-coupled receptor; development; wound healing;
XX tissue regeneration; cellular proliferation; apoptosis; cancer;
XX angiogenesis; inflammation; hyperproliferative disorder;
XX developmental disorder.
XX
XX OS Homo sapiens.

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XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "All linkages are phosphorothioate linkages and
XX all cytidines are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residue"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl residue"
XX
XX PN US2004029273-A1.
XX
XX PD 12-FEB-2004.
XX
XX PF 09-AUG-2002; 2002US-00215448.
XX
XX PR 09-AUG-2002; 2002US-00215448.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Wyatt J;
XX
XX WPI; 2004-179673/17.
XX
XX New antisense oligonucleotide targeted to nucleic acid encoding
XX endothelial differentiation sphingolipid G-protein-coupled receptor 1,
XX for treating cancer, developmental disorder or a condition arising from
XX aberrant apoptosis.
XX
XX Claim 1; SEQ ID NO 70; 50pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding endothelial differentiation gene 1 (EDG1, a G protein coupled
XX receptor, involved in development, wound healing, tissue regeneration,
XX cellular proliferation, apoptosis, cancer, angiogenesis and
XX inflammation), and inhibits the expression of EDG1, i.e. is an antisense
XX (AS) oligonucleotide. Also included are a composition comprising the
XX compound and a carrier or diluent and a method for screening an antisense
XX compound (by contacting a preferred target region of a nucleic acid
XX molecule encoding EDG1 with one or more candidate antisense compounds
XX comprising at least an 8-nucleobase portion that is complementary to the
XX preferred target region and selecting for one or more candidate antisense
XX compounds that inhibit the expression of a nucleic acid encoding EDG1).
XX The compound, composition and methods are useful for treating a disease
XX or condition associated with EDG1, such as a hyperproliferative disorder,
XX developmental disorder or a disease or condition arising from aberrant
XX apoptosis. They are also useful in research and diagnostics for
XX modulating the expression of EDG1. Experimental protocols are described
XX but no results are given. The present sequence is an AS oligonucleotide
XX targeting human EDG1.
XX
XX Sequence 20 BP; 5 A; 9 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1720 AGCCATGTTTCACCTGCCAC 1739
XX ||||| ||| ||| |||
XX Db 1 AACCATCTTCATCTCCAC 20
XX
XX RESULT 2029
XX ADJ62176/c
XX ID ADJ62176 standard; cDNA; 20 BP.
XX
XX

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AC ADJ62176;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human EDG1 antisense target sequence ISIS35058.
XX
KW Human; ss; antisense gene therapy; endothelial differentiation gene 1;
KW EDG1; G protein-coupled receptor; development; wound healing;
KW tissue regeneration; cellular proliferation; apoptosis; cancer;
KW angiogenesis; inflammation; hyperproliferative disorder;
KW developmental disorder.
XX
OS Homo sapiens.
XX
PN US2004029273-A1.
XX
PD 12-FEB-2004.
XX
PF 09-AUG-2002; 2002US-00215448.
XX
PR 09-AUG-2002; 2002US-00215448.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Wyatt J;
XX
XX WPI; 2004-179673/17.
XX
XX New antisense oligonucleotide targeted to nucleic acid encoding
PT endothelial differentiation sphingolipid G-protein-coupled receptor 1,
PT for treating cancer, developmental disorder or a condition arising from
PT aberrant apoptosis.
XX
XX Example 15; SEQ ID NO 102; 50pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding endothelial differentiation gene 1 (EDG1), a G protein coupled
CC receptor, involved in development, wound healing, tissue regeneration,
CC cellular proliferation, apoptosis, cancer, angiogenesis and
CC (AS) oligonucleotide. Also included are a composition comprising the
CC compound and a carrier or diluent and a method for screening an antisense
CC compound (by contacting a preferred target region of a nucleic acid
CC molecule encoding EDG1 with one or more candidate antisense compounds
CC comprising at least an 8-nucleobase portion that is complementary to the
CC preferred target region and selecting for one or more candidate antisense
CC compounds that inhibit the expression of a nucleic acid encoding EDG1).
CC The compound, composition and methods are useful for treating a disease
CC or condition associated with EDG1, such as a hyperproliferative disorder,
CC developmental disorder or a disease or condition arising from aberrant
CC apoptosis. They are also useful in research and diagnostics for
CC modulating the expression of EDG1. Experimental protocols are described
CC but no results are given. The present sequence is a target region of the
CC human cDNA for EDG1.
XX
SQ Sequence 20 BP; 6 A; 0 C; 9 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1720 AGCATGTTCCACCTGCCAC 1739
Db 20 AACCATCTTCATCTTCCAC 1
RESULT 2030
ADJ15834/C
ID ADJ15834 standard; DNA; 20 BP.
XX
AC ADJ15834;
XX

DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 384.
XX
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytotatic; antilipaemic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20 /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
PN WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 384; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytotatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX

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SQ Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1430 CCGCAGAGGATGCCATGAAA 1449
Db 20 CCCCAGAGGATCCCATATTA 1

RESULT 2031
ADJ17546
ID ADJ17546 standard; DNA; 20 BP.
XX
AC ADJ17546;
XX
DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 2096.
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 2096; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan

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CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer.
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
  Query Match      0.8%; Score 13.6; DB 1; Length 20;
  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1505 CCATATTTGCACATAAAGGAG 1524
Db 1 CCATATTTGTTCTACAGCAG 20

RESULT 2032
ADJ17107
ID ADJ17107 standard; DNA; 20 BP.
XX
AC ADJ17107;
XX
DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 1657.
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX

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PA (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer.
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 1657; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage, at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1506 CATATTGTCACATAAGGAGA 1525
XX ||||| ||||| |||||
XX Db 1 CATATTGTCACAGCAGA 20
XX
XX RESULT 2033
XX ADJ16943
XX ID ADJ16943 standard; DNA; 20 BP.
XX AC ADJ16943;
XX AC
XX 20-MAY-2004 (first entry)
XX
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 1493.
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX gall stone; triglyceridaemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cytostatic; antilipemic;
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX modified_base 1..5
XX /tag= a

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FT /mod_base= OTHER
FT /note= "OTHER= 2', methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2', methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX Kane CD;
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 1493; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage, at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1502 CTTCCATATTGTCACATAAG 1521
XX ||||| ||||| |||||
XX Db 1 CTCCCATATTGTCACAG 20
XX
XX RESULT 2034
XX ADL27678
XX ID ADL27678 standard; DNA; 20 BP.
XX AC ADL27678;
XX AC
XX 20-MAY-2004 (first entry)
XX
XX Human FasL cDNA, antisense oligonucleotide #14.
XX Antisense therapy; human; Fas; Fas ligand; FasL; Apo-1L; CD95L;

```

KW Fas associated protein 1; Fas-1; signal transduction; autoimmune disease; inflammatory disease; cancer; immunosuppressive; antiinflammatory;
 KW cytosolic; phosphorothioate; ss.
 XX

OS Homo sapiens.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 FT and 3' ends, which are 5 nucleotides in length at each
 FT end. All cytidine residues are 5-methylcytidines"
 XX

PN US6653133-B1.

XX 25-NOV-2003.

XX 18-SEP-2000; 2000US-00665615.

XX 12-APR-1999; 99US-00290640.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Marcusson EG, Wyatt J;

XX WPI; 2004-050524/05.

XX New antisense oligonucleotides of 20-50 nucleobases, useful for treating
 PT autoimmune or inflammatory diseases, and cancer.
 XX

PS Example 3; SEQ ID NO 39; 76pp; English.

XX The present invention relates to antisense compounds targeted to nucleic
 CC acids encoding human Fas (also known as Apo-1 or CD95), Fas ligand (FasL,
 CC also Apo-1L and CD95L), and Fas associated protein 1 (Fap-1). The
 CC antisense compound comprises an antisense oligonucleotide that
 CC specifically hybridises with one of the said nucleic acids and inhibits
 CC Fas, FasL or Fap-1 mediated signal transduction. The antisense
 CC oligonucleotide is a chimeric oligonucleotide. The antisense
 CC oligonucleotide comprises at least one modified internucleoside linkage,
 CC preferably a phosphorothioate linkage. It also comprises at least one
 CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
 CC moiety. The antisense oligonucleotide further comprises at least one
 CC modified nucleobase, preferably a 5-methylcytosine. The antisense
 CC oligonucleotides are useful for the treatment of autoimmune or
 CC inflammatory diseases, and cancers associated with overexpression of or
 CC constitutive activation of Fas, FasL, or Fap-1. The present sequence
 CC represents an antisense oligonucleotide used in the examples of the
 CC present invention.

XX Sequence 20 BP; 3 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1659 CACCCCTCACGGGAGGCC 1678
 Db 1 CCTCTTCACATGGGAGGCC 20
 |||||
 |||||

RESULT 2035

ADJ24114/c

ID ADJ24114 standard; DNA; 20 BP.

AC ADJ24114;

XX 20-MAY-2004 (first entry)

DE Human endothelial lipase antisense oligonucleotide, SEQ ID 2512.

XX

KW Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
 KW Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
 KW cardiovascular disorder; metabolic syndrome X; ss.
 XX

OS Homo sapiens.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 FT and 3' ends, which are 4 nucleotides in length. Also all
 FT cytidine residues are 5-methylcytidines"
 XX

PN WO2004009541-A2.

XX 29-JAN-2004.

XX 18-JUL-2003; 2003WO-US022410.

XX 19-JUL-2002; 2002US-0397106P.

XX (PHAA) PHARMACIA CORP.

XX Bhat BG;

XX WPI; 2004-132912/13.

XX New antisense oligonucleotide for modulating endothelial lipase
 PT expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
 PT high density lipoprotein or cardiovascular disorders.
 XX

PS Claim 3; SEQ ID NO 2512; 1007pp; English.

XX The present invention relates to antisense oligonucleotides (ADJ21603-
 CC ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
 CC (ADJ25517), where the antisense oligonucleotide specifically hybridises
 CC with and inhibits the expression of EL. The antisense oligonucleotides
 CC are useful for modulating the expression of endothelial lipase in cells
 CC or tissues to treat diseases associated with EL expression, such as
 CC dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
 CC disorder or metabolic syndrome X. In addition, the oligonucleotides are
 CC used for diagnostics, prophylaxis, or as research reagents or kits.

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 460 GACATCAACAAGCGCTATC 479
 Db 20 GACATCCACAAGAGGCTCTC 1
 |||||
 |||||

RESULT 2036

ADJ22164/c

ID ADJ22164 standard; DNA; 20 BP.

AC ADJ22164;

XX 20-MAY-2004 (first entry)

DE Human endothelial lipase antisense oligonucleotide, SEQ ID 562.

KW Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
 KW Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
 KW cardiovascular disorder; metabolic syndrome X; ss.

OS Homo sapiens.

OS Synthetic.

```

XX Key Location/Qualifiers
PH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX WO2004009541-A2.
XX 29-JAN-2004.
XX 18-JUL-2003; 2003WO-US022410.
XX 19-JUL-2002; 2002US-0397106P.
XX (PHAA ) PHARMACIA CORP.
XX Bhat BG;
XX WPI; 2004-132912/13.
XX New antisense oligonucleotide for modulating endothelial lipase
XX expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
XX high density lipoprotein or cardiovascular disorders.
XX Claim 3; SEQ ID NO 562; 1007pp; English.
XX The present invention relates to antisense oligonucleotides (ADJ21603-
XX ADJ2510) targeted to human Endothelial Lipase (EL) coding sequence
XX (ADJ25517), where the antisense oligonucleotide specifically hybridizes
XX with and inhibits the expression of EL. The antisense oligonucleotides
XX are useful for modulating the expression of endothelial lipase in cells
XX or tissues to treat diseases associated with EL expression, such as
XX dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
XX disorder or metabolic syndrome X. In addition, the oligonucleotides are
XX used for diagnostics, prophylaxis, or as research reagents or kits.
XX Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 59 GACTGCTGAACCCAGGGGA 78
Db ||||| ||||| ||||| |||||
20 GTCTGGGGAACCCAGCGGA 1
RESULT 2037
ADK81412/c
ID ADK81412 standard; DNA; 20 BP.
XX AC ADK81412;
XX 20-MAY-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide to target Navl.3 #8746.
XX Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX Synthetic.
XX WO2004016754-A2.
XX 26-FEB-2004.
XX Chimeric phosphorothioate oligonucleotide to target Navl.3 #8746.
XX Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX Synthetic.
XX WO2004016754-A2.
XX 26-FEB-2004.
XX 14-AUG-2003; 2003WO-US025465.
XX New antisense compound targeted to a nucleic acid molecule encoding
XX Navl.3, useful for treating a disease or condition associated

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PR 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Roberds SL;
XX WPI; 2004-203785/19.
XX New antisense compound targeted to a nucleic acid molecule encoding
XX Navl.3, useful for treating a disease or condition associated
XX with Navl.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX Claim 4; SEQ ID NO 8746; 417pp; English.
XX The present invention relates to an antisense compound targeted to a
XX nucleic acid molecule encoding Navl.3, where the antisense compound
XX specifically hybridizes with and inhibits the expression of Navl.3. The
XX compound and composition are useful for treating a disease or condition
XX associated with Navl.3, e.g. pain including but not limited to
XX neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX pain from burns, migraine headache, cluster headache, mild-to-moderate
XX headache; seizure disorder such as childhood seizure disorder, including
XX but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX sequence represents a chimeric phosphorothioate oligonucleotide with
XX 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX human Navl.3 expression, the oligonucleotides are designed to target
XX different regions of the human Navl.3 RNA.
XX Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 240 TGGCGGCAGTGACCCCTGGAG 259
Db ||||| ||||| ||||| |||||
20 TGGTGTGACAGGCCCTGGAG 1
RESULT 2038
ADK78465/c
ID ADK78465 standard; DNA; 20 BP.
XX AC ADK78465;
XX 20-MAY-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide to target Navl.3 #5799.
XX Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX Synthetic.
XX WO2004016754-A2.
XX 26-FEB-2004.
XX 14-AUG-2003; 2003WO-US025465.
XX 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Roberds SL;
XX WPI; 2004-203785/19.
XX New antisense compound targeted to a nucleic acid molecule encoding
XX Navl.3, useful for treating a disease or condition associated

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| | |
|-----------------------|---|
| PT | with Nav1.3, e.g. pain, seizure disorder such as childhood seizure |
| PT | disorder, or ataxia. |
| XX | |
| XX | Claim 4; SEQ ID NO 5799; 417pp; English. |
| XX | |
| CC | The present invention relates to an antisense compound targeted to a |
| CC | nucleic acid molecule encoding Nav1.3, where the antisense compound |
| CC | specifically hybridizes with and inhibits the expression of Nav1.3. The |
| CC | compound and composition are useful for treating a disease or condition |
| CC | associated with Nav1.3, e.g. pain including but not limited to |
| CC | neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, |
| CC | diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, |
| CC | pain from burns, migraine headache, cluster headache, mild-to-moderate |
| CC | headache; seizure disorder such as childhood seizure disorder, including |
| CC | but not limited to neonatal or infantile epilepsy; or ataxia. The present |
| CC | sequence represents a chimeric phosphorothioate oligonucleotide with |
| CC | 2'MOE wings and a deoxy gap. Used during the antisense inhibition of |
| CC | human Nav1.3 expression, the oligonucleotides are designed to target |
| CC | different regions of the human Nav1.3 RNA. |
| XX | |
| XX | |
| XX | Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other; |
| XX | |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| Best Local Similarity | 80.0%; Pred. No. 1.1e+03; |
| Matches | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0 |
| QY | 111 CCCGCCGATGCCCATGGATC 130 |
| | |
| Db | 20 CCAGCTTATGCCATGGATC 1 |
| RESULT 2039 | |
| ADK73521/c | |
| ID | ADK73521 standard; DNA; 20 BP. |
| XX | |
| AC | ADK73521; |
| XX | |
| XX | 20-MAY-2004 (first entry) |
| XX | |
| XX | Chimeric phosphorothioate oligonucleotide to target Nav1.3 #855. |
| DE | |
| XX | Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; |
| KW | diabetic neuropathy; arthritic pain; migraine headache; |
| KW | infantile epilepsy; ataxia; ss. |
| XX | |
| OS | Synthetic. |
| XX | |
| PN | WO2004016754-A2. |
| XX | |
| PD | 26-FEB-2004. |
| XX | |
| PF | 14-AUG-2003; 2003WO-US025465. |
| XX | |
| PR | 14-AUG-2002; 2002US-0403416P. |
| XX | |
| PA | (PHAA) PHARMACIA CORP. |
| XX | |
| PI | Roberts SL; |
| XX | |
| XX | WPI; 2004-203785/19. |
| XX | |
| PT | New antisense compound targeted to a nucleic acid molecule encoding |
| PT | Nav1.3, useful for treating a disease or condition associated |
| PT | with Nav1.3, e.g. pain, seizure disorder such as childhood seizure |
| PT | disorder, or ataxia. |
| XX | |
| XX | Claim 4; SEQ ID NO 855; 417pp; English. |
| XX | |
| CC | The present invention relates to an antisense compound targeted to a |
| CC | nucleic acid molecule encoding Nav1.3, where the antisense compound |
| CC | specifically hybridizes with and inhibits the expression of Nav1.3. The |
| CC | compound and composition are useful for treating a disease or condition |
| CC | associated with Nav1.3, e.g. pain including but not limited to |
| CC | neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, |
| CC | diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, |
| CC | pain from burns, migraine headache, cluster headache, mild-to-moderate |
| CC | headache; seizure disorder such as childhood seizure disorder, including |
| CC | but not limited to neonatal or infantile epilepsy; or ataxia. The present |
| CC | sequence represents a chimeric phosphorothioate oligonucleotide with |
| CC | 2'MOE wings and a deoxy gap. Used during the antisense inhibition of |
| CC | human Nav1.3 expression, the oligonucleotides are designed to target |
| CC | different regions of the human Nav1.3 RNA. |
| XX | |
| XX | |
| XX | Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other; |
| XX | |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| Best Local Similarity | 80.0%; Pred. No. 1.1e+03; |
| Matches | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0 |
| QY | 111 CCCGCCGATGCCCATGGATC 130 |
| | |
| Db | 20 CCAGCTTATGCCATGGATC 1 |
| RESULT 2039 | |
| ADK73521/c | |
| ID | ADK73521 standard; DNA; 20 BP. |
| XX | |
| AC | ADK73521; |
| XX | |
| XX | 20-MAY-2004 (first entry) |
| XX | |
| XX | Chimeric phosphorothioate oligonucleotide to target Nav1.3 #855. |
| DE | |
| XX | Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; |
| KW | diabetic neuropathy; arthritic pain; migraine headache; |
| KW | infantile epilepsy; ataxia; ss. |
| XX | |
| OS | Synthetic. |
| XX | |
| PN | WO2004016754-A2. |
| XX | |
| PD | 26-FEB-2004. |
| XX | |
| PF | 14-AUG-2003; 2003WO-US025465. |
| XX | |
| PR | 14-AUG-2002; 2002US-0403416P. |
| XX | |
| PA | (PHAA) PHARMACIA CORP. |
| XX | |
| PI | Roberts SL; |
| XX | |
| XX | WPI; 2004-203785/19. |
| XX | |
| PT | New antisense compound targeted to a nucleic acid molecule encoding |
| PT | Nav1.3, useful for treating a disease or condition associated |
| PT | with Nav1.3, e.g. pain, seizure disorder such as childhood seizure |
| PT | disorder, or ataxia. |
| XX | |
| XX | Claim 4; SEQ ID NO 855; 417pp; English. |
| XX | |
| CC | The present invention relates to an antisense compound targeted to a |
| CC | nucleic acid molecule encoding Nav1.3, where the antisense compound |
| CC | specifically hybridizes with and inhibits the expression of Nav1.3. The |
| CC | compound and composition are useful for treating a disease or condition |
| CC | associated with Nav1.3, e.g. pain including but not limited to |
| CC | neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, |
| CC | diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, |
| CC | pain from burns, migraine headache, cluster headache, mild-to-moderate |
| CC | headache; seizure disorder such as childhood seizure disorder, including |
| CC | but not limited to neonatal or infantile epilepsy; or ataxia. The present |
| CC | sequence represents a chimeric phosphorothioate oligonucleotide with |
| CC | 2'MOE wings and a deoxy gap. Used during the antisense inhibition of |
| CC | human Nav1.3 expression, the oligonucleotides are designed to target |
| CC | different regions of the human Nav1.3 RNA. |
| XX | |
| XX | |
| XX | Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other; |
| XX | |
| Query Match | 0.8%; Score 13.6; DB 1; Length 20; |
| Best Local Similarity | 80.0%; Pred. No. 1.1e+03; |
| Matches | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0 |
| QY | 111 CCCGCCGATGCCCATGGATC 130 |
| | |
| Db | 20 CCAGCTTATGCCATGGATC 1 |
| RESULT 2039 | |
| ADK73521/c | |
| ID | ADK73521 standard; DNA; 20 BP. |

SQ Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1452 TCATTCTTCCCTCAGTCTG 1471
|||||
Db 20 TCATTCTTCCAGTCTTG 1

RESULT 2041
ADL00735
ID ADL00735 standard; DNA; 20 BP.
XX
AC ADL00735;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #268.
XX
KW Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
OS Homo sapiens.
XX
PN WO2004016224-A2.
XX
PD 26-FEB-2004.
XX
PF 19-AUG-2003; 2003WO-US025891.
XX
PR 19-AUG-2002; 2002US-0404484P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Weinstein EJ;
XX
DR WPI; 2004-192065/18.
XX
PT New antisense compounds targeted to a nucleic acid molecule encoding
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
PS Claim 4; SEQ ID NO 268; 336pp; English.
XX
CC The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising
CC administering the antisense compound to an animal to inhibit expression
CC of VCC-1. The antisense oligonucleotide comprises at least one modified
CC internucleoside linkage, preferably a phosphorothioate linkage. It also
CC comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl sugar moiety, and at least one modified nucleobase,
CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
CC is a chimeric oligonucleotide. The antisense compound is useful for
CC treating a disease or condition associated with VCC-1, such as diabetes,
CC an immunological disorder, a cardiovascular disorder, a neurologic
CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic

CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
CC antisense oligonucleotides may also be used for wound healing, for
CC healing of bone fractures and cartilage damage, for regeneration of
CC tissues or organs, for treating periodontal diseases, for gut protection
CC or regeneration, for treatment of lung or liver fibrosis or for
CC management of atrial fibrillation. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC the invention.
XX
SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 753 GGAAGTGTCCCTGCTCAAGG 772
|||||
Db 1 GGAAGGTTCCTGCTGGAGG 20

RESULT 2042
ADL00975
ID ADL00975 standard; DNA; 20 BP.
XX
AC ADL00975;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #508.
XX
KW Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
OS Homo sapiens.
XX
PN WO2004016224-A2.
XX
PD 26-FEB-2004.
XX
PF 19-AUG-2003; 2003WO-US025891.
XX
PR 19-AUG-2002; 2002US-0404484P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Weinstein EJ;
XX
DR WPI; 2004-192065/18.
XX
PT New antisense compounds targeted to a nucleic acid molecule encoding
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
PS Claim 4; SEQ ID NO 508; 336pp; English.
XX
CC The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising

administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, ischaemia, reperfusion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis, atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of the invention.

Sequence 20 BP; 9 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.le+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 660 CTACAAAGGCAAAAGCAAGC 679
|||||
DB 1 CTACAAAGGCAAGCAAGC 20

RESULT 2043

ADL00773
ID ADL00773 standard; DNA; 20 BP.
XX
AC ADL00773;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #306.
XX

Human; VEGF co-regulated chemokine-1; VCC-1;
vascular endothelial growth factor; ss; antisense compound;
phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
5-methylcytosine; antisense oligonucleotide; diabetes;
immunological disorder; cardiovascular disorder; neurological disorder;
ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
fibrosis; myocardial infarction; wound healing; bone fracture;
cartilage damage; tissue regeneration; organ regeneration;
periodontal disease; gut regeneration; atrial fibrillation.

XX Homo sapiens.

OS

XX WO2004016224-A2.

XX 26-FEB-2004.

XX 19-AUG-2003; 2003WO-US025891.

XX 19-AUG-2002; 2002US-040484P.

XX (PHAA) PHARMACIA CORP.

XX Weinstein EJ;

XX WPI; 2004-192065/18.

New antisense compounds targeted to a nucleic acid molecule encoding vascular endothelial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a neurologic disorder.

PS Claim 4; SBQ ID NO 306; 336pp; English.

XX The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) co-regulated chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in cells or tissues comprising contacting the cells or tissues with the antisense compound and a method of treating a human having a disease or condition associated with VCC-1 comprising administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, ischaemia, reperfusion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis, atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of the invention.

Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.le+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 661 TACAAAGGCAAAAGCAAGCT 680
|||||
DB 1 TACAAAGGCAAGCAAGCT 20

RESULT 2044

ADM53450
ID ADM53450 standard; DNA; 20 BP.

XX ADM53450;

XX 03-JUN-2004 (first entry)

XX Human Fas ligand FasL antisense oligonucleotide seqid 39.

immunosuppressive; antiinflammatory; hepatotropic; virucide; cytostatic;
antisense technology; Fas; Fas ligand; Fas-1; Fas associated disorder;
Fas-1 associated disorder; ischaemia reperfusion injury; apoptosis;
allograft; autoimmune disease; inflammatory disease; hepatitis; cancer;
lymphoma; human; fas ligand; FasL; antisense oligonucleotide; ss.

OS Homo sapiens.

Key Location/Qualifiers
FT modified_base 1..20

FT /*tag= b
FT /mod_base= OTHER

FT /note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"

FT modified_base 1..5
FT /*tag= a

FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

FT modified_base 15..20
FT /*tag= c

FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"


```
DT 03-JUN-2004 (first entry)
DE Human transcription factor Dp-1 DNA antisense oligonucleotide #4.
KW Human; transcription factor; Dp-1; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; developmental disorder; hyperproliferative disorder;
KW cancer; lymphoma; aberrant apoptosis; infection; inflammation;
KW cytostatic; antiinflammatory; antimicrobial.
OS Homo sapiens.
XX
XX
XX US2003225012-A1.
XX
XX
XX 04-DEC-2003.
XX
XX
XX 31-MAY-2002; 2002US-00160554.
XX
XX 31-MAY-2002; 2002US-00160554.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Freier SM;
XX
XX WPI; 2004-042169/04.
XX
XX New antisense oligonucleotides inhibiting the expression of transcription
XX factor Dp-1, useful for preventing or treating diseases associated with
XX transcription factor Dp-1, such as developmental or hyperproliferative
XX disorders.
XX
XX Example 15; SEQ ID NO 14; 40pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding the human transcription factor Dp-1 polypeptide. The compound is
XX an antisense oligonucleotide that specifically hybridises with the
XX nucleic acid molecule encoding transcription factor Dp-1 and inhibits
XX expression of the polypeptide. The antisense oligonucleotide comprises at
XX least one modified internucleoside linkage i.e. a phosphorothioate
XX linkage, at least one modified sugar moiety, preferably a 2'-O-
XX methoxyethyl sugar moiety, or at least one modified nucleobase comprising
XX a 5-methylcytosine. The antisense compounds are useful for modulating the
XX expression of transcription factor Dp-1 and for preventing or treating
XX developmental disorders, hyperproliferative disorders (i.e. cancer,
XX particularly lymphoma), and diseases or conditions that arise as a result
XX of aberrant apoptosis. The antisense compounds may also be used in
XX research and diagnostics and in preventing or delaying infection or
XX inflammation. This sequence represents an antisense oligonucleotide of
XX the invention.
XX
XX Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1672 GCAGCCCCCACTACATCTT 1691
XX ||||| ||||| ||||| |||||
XX Db 20 GCTGCCGACACCATCTT 1
XX
XX RESULT 2047
XX ADM28997
XX ID ADM28997 standard; DNA; 20 BP.
XX
XX AC ADM28997;
XX
XX 17-JUN-2004 (first entry)
XX
XX Human IL4R related primer SEQ ID NO:36.
XX
XX type 1 diabetes; detection; polymorphism; interleukin 4; IL4;
XX interleukin 13; IL13; immunology; molecular biology; autoimmune disease;
KW
```

```
KW multiple sclerosis; myasthenia gravis; ulcerative colitis;
KW pernicious anaemia; rheumatoid arthritis; systemic lupus erythematosus;
KW inflammatory bowel disease; human; interleukin 4 receptor; IL4R; primer;
KW ss; single nucleotide polymorphism; SNP; chromosome 16.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX EP1405921-A1.
XX
XX 07-APR-2004.
XX
XX 01-OCT-2003; 2003EP-00022242.
XX
XX 04-OCT-2002; 2002US-00264965.
XX 08-OCT-2002; 2002US-00267844.
XX
XX (HOFF) ROCHE DIAGNOSTICS GMBH.
XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
XX Mirel DB, Erlich HA, Bugawan TL, Noble JA, Valdez AM;
XX WPI; 2004-318714/30.
XX
XX Detecting an individual's risk for autoimmune diseases, in particular
XX type 1 diabetes, by determining sequence variants or polymorphisms
XX present at the IL-4 and IL-13 loci.
XX
XX Example 1; SEQ ID NO 36; 168pp; English.
XX
XX The present invention describes a method for determining an individual's
XX risk for type 1 diabetes. The method comprises detecting the presence of
XX a type 1 diabetes-associated polymorphism in the interleukin 4 (IL4) or
XX IL13 loci in a nucleic acid sample of the individual, where the presence
XX of the polymorphism indicates the individual's risk for type 1 diabetes.
XX The human IL4 and IL13 genes are located on chromosome 5. Also described
XX is a kit for determining an individual's risk for type 1 diabetes,
XX comprising one or more sequence-specific oligonucleotide each
XX individually comprising a sequence that hybridises under stringent
XX conditions to a type 1 diabetes-associated IL4 or IL13 polymorphism, and
XX instructions to use the kit to determine the individual's risk for type 1
XX diabetes. Detection of one or more IL4 or IL13 polymorphisms in a nucleic
XX acid sample of an individual, is useful for the determination of the
XX individual's risk for type 1 diabetes. The methods and compositions of
XX the present invention are also useful in the field of immunology and
XX molecular biology, in particular for detecting an individual's risk for
XX autoimmune diseases, such as multiple sclerosis, myasthenia gravis,
XX ulcerative colitis, pernicious anaemia, rheumatoid arthritis, systemic
XX lupus erythematosus and inflammatory bowel disease. The present sequence
XX represents a primer for human IL4 receptor (IL4R), which is used in the
XX exemplification of the present invention. The human IL4R gene is located
XX on chromosome 16.
XX
XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1521 GGAGATTCAGCTACAAAGG 1540
XX ||||| ||||| ||||| |||||
XX Db 1 GCAGACTCAGCAACAGAGG 20
XX
XX RESULT 2048
XX ADM77983/C
XX ID ADM77983 standard; DNA; 20 BP.
XX
XX AC ADM77983;
XX
XX 17-JUN-2004 (first entry)
XX
XX RT-PCR primer used to amplify human GAPDH as a control SeqID 21.
XX
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XX RT-PCR; primer; ss; PCR; ovarian endometriosis;
KW differentially expression; OEX; microarray; cytostatic; vaccine; GAPDH.
XX
XX OS
XX Homo sapiens.
XX WO2004024952-A1.
XX
XX 25-MAR-2004.
XX
XX 12-AUG-2003; 2003WO-JP010257.
XX
XX 30-AUG-2002; 2002US-0407365P.
XX 28-FEB-2003; 2003US-0450320P.
XX
XX (ONCO-) ONCOTHERAPY SCI INC.
XX (UYTY) UNIV TOKYO.
XX
XX Nakamura Y, Katagiri T;
XX
XX WPI; 2004-340194/31.
XX
XX Diagnosing, treating and preventing ovarian endometriosis comprises
XX determining the expression level of an ovarian endometriosis-associated
XX gene in the sample.
XX
XX Example 2; SEQ ID NO 21; 103pp; English.
XX
XX This invention relates to a novel method for the diagnosis of, or
XX identification of a predisposition to, ovarian endometriosis.
XX Specifically, it refers to identifying differentially expressed ovarian
XX endometriosis associated (OEX) genes that are up- or down- regulated
XX compared to a control. The present invention describes a comprehensive
XX cDNA microarray system to identify differentially expressed OEX genes
XX such as tissue factor pathway inhibitor-2 (TFPI-2) and interlectin (ITLN).
XX Accordingly, cytostatic pharmaceutical compositions can be targeted to
XX the identified OEX genes as appropriate. Furthermore, it provides
XX methods, kits and compositions for the development of vaccines to treat
XX or prevent ovarian endometriosis. This oligonucleotide sequence is an RT-
XX PCR primer used to amplify human GAPDH as a control, given in an
XX exemplification of the invention.
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 621 TAAGCTGGACAACTGGGCG 640
XX 20 TGAGCTTGACAAAGTGTGCG 1
XX
XX
XX RESULT 2049
XX ADN03529
XX ID ADN03529 standard; DNA; 20 BP.
XX
XX AC ADN03529;
XX
XX 01-JUL-2004 (first entry)
XX
XX Mouse Ptc cDNA amplifying RT-PCR primer #1.
XX
XX Embryonic stem cell; ES cell; pancreatic islet-like cell;
XX type I diabetic; nerve-like cell; nerve function; cell therapy;
XX KW reverse transcription; RT; PCR; primer; mouse; ss; cell differentiation;
XX KW SHH signal receptor; Ptc.
XX
XX OS Mus sp.
XX
XX US2004072344-A1.
XX
XX 15-APR-2004.
XX
```

```
XX 25-JUL-2003; 2003US-00626772.
XX
XX 25-JAN-2002; 2002US-00054789.
XX
XX (INOUE/) INOUE K.
XX (KIMD/) KIM D.
XX (GUY/) GU Y.
XX (ISHI/) ISHII M.
XX
XX Inoue K, Kim D, Gu Y, Ishii M;
XX
XX WPI; 2004-328577/30.
XX
XX Inducing mammalian embryonic stem (ES) cell differentiation into
XX functioning cells, for treating e.g. diabetes, by culturing mammalian ES
XX cells in a medium having leukemia inhibitory factor and basic FGF to give
XX embryonic bodies.
XX
XX Example 5; SEQ ID NO 33; 30pp; English.
XX
XX The invention relates to a method for inducing differentiation of
XX mammalian embryonic stem (ES) cells into functioning cells. The method is
XX useful for inducing differentiation of mammalian ES cells into
XX functioning cells. The pancreatic islet-like cell clusters induced from
XX allogenic ES cells are useful for treating a mammalian patient having
XX disorders in pancreatic islet function, such as when the patient is a
XX type I diabetic patient. The nerve-like cells induced from allogenic ES
XX cells can be used for treating a mammalian patient having disorders in
XX nerve function. The method is also useful in cell therapy. The present
XX sequence is a reverse transcription (RT)-PCR primer used to amplify mouse
XX SHH signal receptor, patched (Ptc) cDNA. This sequence is used to
XX illustrate the method of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 614 CCTACATTAAGCTGGACAAA 633
XX 1 CCTCCTTTACGTGGACAAA 20
XX
XX
XX RESULT 2050
XX ADN03871/C
XX ID ADN03871 standard; DNA; 20 BP.
XX
XX AC ADN03871;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human ICAM-specific antisense oligonucleotide #1.
XX
XX Antisense activity; down-regulation; antisense; ICAM; human; ss.
XX
XX Homo sapiens.
XX
XX OS US2004073376-A1.
XX
XX 15-APR-2004.
XX
XX 14-JAN-2002; 2002US-00050888.
XX
XX 19-JAN-2001; 2001US-0262993P.
XX
XX (UTAH) UNIV UTAH RES FOUND.
XX
XX Gesteland RF, Atkins JF, Matveeva OV, Giddings MC;
XX
XX WPI; 2004-364070/34.
XX
```

PT Predicting antisense activity of an oligonucleotide for down-regulating
PT expression of an RNA, comprises developing an artificial neural network,
PT determining counts of mapped sequence motifs, and obtaining a output of
PT activity.

PS Disclosure; SEQ ID NO 7; 25pp; English.

XX The present invention relates to the method for making an artificial
CC neural network embodied on a computer-readable medium for predicting
CC antisense activity of oligonucleotides for down-regulating expression of
CC a selected RNA. The invention provides a five-fold reduction in the
CC number of oligonucleotides to be screened in vivo to find effective
CC targets. The present sequence is human ICAM-specific antisense
CC oligonucleotide. This sequence is used in the invention.

XX Sequence 20 BP; 2 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 226 GAGAGTGGTGGTGGGGG 245

Db 20 GAGAGGGGAGTGGTGGGGG 1

RESULT 2051

ADN62157

ID ADN62157 standard; DNA; 20 BP.

XX AC ADN62157;

XX DT 01-JUL-2004 (first entry)

XX DE Human NOV12a RTQ-PCR forward primer.

XX KW Human; ss; PCR; NOVX; diabetes; obesity; infectious disease; anorexia;
KW cancer-associated cachexia; cancer; neurodegenerative disorder;
KW Alzheimer's disease; Parkinson's disease; immune disorder;
KW haematopoietic disorder; dyslipidaemia; chronic disease; primer; RTQ-PCR;
KW real time quantitative PCR.

XX OS Homo sapiens.

XX PN US2004043382-A1.

XX PD 04-MAR-2004.

XX PF 07-MAR-2002; 2002US-00092900.

XX PR 08-MAR-2001; 2001US-0274191P.

XX PR 08-MAR-2001; 2001US-0274194P.

XX PR 08-MAR-2001; 2001US-0274281P.

XX PR 08-MAR-2001; 2001US-0274322P.

XX PR 09-MAR-2001; 2001US-0274849P.

XX PR 12-MAR-2001; 2001US-0275235P.

XX PR 13-MAR-2001; 2001US-0275578P.

XX PR 13-MAR-2001; 2001US-0275579P.

XX PR 13-MAR-2001; 2001US-0275601P.

XX PR 14-MAR-2001; 2001US-0276000P.

XX PR 16-MAR-2001; 2001US-0276776P.

XX PR 19-MAR-2001; 2001US-0276994P.

XX PR 20-MAR-2001; 2001US-0277239P.

XX PR 20-MAR-2001; 2001US-0277321P.

XX PR 20-MAR-2001; 2001US-0277327P.

XX PR 20-MAR-2001; 2001US-0277338P.

XX PR 21-MAR-2001; 2001US-0277791P.

XX PR 22-MAR-2001; 2001US-0277833P.

XX PR 23-MAR-2001; 2001US-0278152P.

XX PR 26-MAR-2001; 2001US-0278894P.

XX PR 27-MAR-2001; 2001US-0278999P.

XX PR 27-MAR-2001; 2001US-0279036P.

XX PR 28-MAR-2001; 2001US-0279344P.

PR 30-MAR-2001; 2001US-0279995P.
PR 30-MAR-2001; 2001US-0280233P.
PR 02-APR-2001; 2001US-0280802P.
PR 02-APR-2001; 2001US-0280822P.
PR 04-APR-2001; 2001US-0280900P.
PR 04-APR-2001; 2001US-0281444P.
PR 13-APR-2001; 2001US-0283675P.
PR 30-APR-2001; 2001US-0287424P.
PR 02-MAY-2001; 2001US-0288066P.
PR 03-MAY-2001; 2001US-0288342P.
PR 03-MAY-2001; 2001US-0288528P.
PR 15-MAY-2001; 2001US-0291190P.
PR 16-MAY-2001; 2001US-0291099P.
PR 16-MAY-2001; 2001US-0291240P.
PR 30-MAY-2001; 2001US-0294485P.
PR 31-MAY-2001; 2001US-0294889P.
PR 31-MAY-2001; 2001US-0294899P.
PR 18-JUN-2001; 2001US-0299027P.
PR 19-JUN-2001; 2001US-0299103P.
PR 19-JUN-2001; 2001US-0299310P.
PR 10-JUL-2001; 2001US-0304354P.
PR 31-JUL-2001; 2001US-0309198P.
PR 16-AUG-2001; 2001US-0312903P.
PR 10-SEP-2001; 2001US-0318462P.
PR 12-SEP-2001; 2001US-0318770P.
PR 27-SEP-2001; 2001US-0325430P.
PR 27-SEP-2001; 2001US-0325681P.
PR 18-OCT-2001; 2001US-0330380P.
PR 31-OCT-2001; 2001US-0335301P.
PR 14-NOV-2001; 2001US-0332172P.
PR 14-NOV-2001; 2001US-0332271P.
PR 14-NOV-2001; 2001US-0332272P.
PR 14-NOV-2001; 2001US-0333184P.
PR 21-NOV-2001; 2001US-0333272P.
PR 03-DEC-2001; 2001US-0332094P.
PR 03-DEC-2001; 2001US-0337426P.
PR 04-DEC-2001; 2001US-0338092P.
PR 04-DEC-2001; 2001US-0337185P.
PR 03-JAN-2002; 2002US-0345705P.

XX (PADI/) PADIGARU M.

PA (SPYT/) SPYTEK K A.

PA (SHEN/) SHENOY S G.

PA (TAUP/) TAUPIER R J.

PA (PENA/) PENA C E A.

PA (LILL/) LI L.

PA (ZERH/) ZERHUSEN B D.

PA (GUSE/) GUSEV V Y.

PA (JIWW/) JI W.

PA (GORM/) GORMAN L.

PA (MILL/) MILLER C E.

PA (KEKU/) KEKUDA R.

PA (PATT/) PATTURAJAN M.

PA (GANG/) GANGOLLI E A.

PA (VERN/) VERNET C A M.

PA (GUOX/) GUO X S.

PA (TCHE/) TCHERNEV V T.

PA (FERN/) FERNANDES E R.

PA (CASM/) CASMAN S J.

PA (MALY/) MALYANKAR U M.

PA (GERL/) GERLACH V.

PA (LIUY/) LIU Y.

PA (ANDE/) ANDERSON D W.

PA (SPAD/) SPADERNA S K.

PA (CATT/) CATTERTON E.

PA (LEIT/) LEITE M W.

PA (ZHON/) ZHONG H.

PA (ALSO/) ALSOBROOK J P.

PA (LEPL/) LEFLEY D M.

PA (RIEG/) RIEGER D K.

XX (BURG/) BURGESS C E.

PI Padigaru M, Spytek KA, Shenoy SG, Taupier RJ, Pena CEA, Li L;

PI Zerhusen BD, Gusev VV, Ji W, Gorman L, Miller CB, Kekuda R;
PI Patturajan M, Gangolli EA, Vernet CAM, Guo XS, Tchernev VT;
PI Fernandes ER, Casman SJ, Malyankar UM, Gerlach V, Liu Y;
PI Anderson DW, Spaderna SK, Catterton E, Leite MW, Zhong H;
PI Alsbrook JP, Lepley DM, Rieger DK, Burgess CB;
XX WPI; 2004-225693/21.
DR
XX
XX New NOVX polypeptides and nucleic acid molecules useful for diagnosing,
PT preventing or treating NOVX-associated disorders, e.g. cancer, diabetes,
PT infection or obesity, and in chromosome mapping, tissue typing or
PT pharmacogenomics.
XX
PS Example C; SEQ ID NO 426; 786pp; English.
XX
XX The invention relates to an isolated polypeptide (designated NOVX, or
CC NOV1-NOV127) comprising a sequence selected from 178 fully defined amino
CC acid sequences (and their mature forms, variants and fragments). Also
CC included are an isolated nucleic acid molecule encoding NOVX, a vector
CC comprising the nucleic acid, a cell comprising the vector, methods for
CC determining the presence or amount of the polypeptide or the nucleic acid
CC molecule in a sample, methods for determining the presence of or
CC predisposition to a disease associated with altered levels of expression
CC of the above polypeptide or nucleic acid molecule in a first mammalian
CC subject, a method for identifying an agent that binds to the above
CC polypeptide, a method for identifying a potential therapeutic agent for
CC use in the treatment of a pathology that is related to aberrant
CC expression or physiological interactions of the polypeptide, a method of
CC screening for a modulator of activity or of latency or predisposition to
CC a pathology associated with the polypeptide and a method for modulating
CC the activity of the polypeptide cited above. The composition and methods
CC are useful for diagnosing; preventing or treating diseases such as
CC diabetes, obesity, infectious diseases, anorexia, cancer-associated
CC cachexia, cancer, neurodegenerative disorders like Alzheimer's disease or
CC Parkinson's disease, immune disorders, haematopoietic disorders,
CC dyslipidaemias, and other chronic diseases. These may also be used in
CC chromosome mapping, tissue typing, preventive medicine and
CC pharmacogenomics. The polypeptides are also useful as vaccines. The
CC present sequence is an RT-PCR (real time quantitative PCR) primer used
CC to assay tissue specific expression of a NOVX mRNA.
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 306 CCCACTCAGCTCTGCACCAG 325
|||||
Db 1 CCCATTGAGCACTGAACAG 20

RESULT 2052
ADM14784/c
ID ADM14784 standard; DNA; 20 BP.
XX
AC ADM14784;
XX
XX 01-JUL-2004 (first entry)
DT
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:971.
DE
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /notes= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /notes= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /notes= "2'-O-methoxyethyls"
FT
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischaemia.
XX
XX Claim 4; SEQ ID NO 971; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1431 CGCAGAGGATGCCATGAAC 1450
|||||
Db 20 CCCGAGGATGCCCTGAGAC 1

RESULT 2053
ADM14152/c
ID ADM14152 standard; DNA; 20 BP.
XX
XX ADM14152;
AC

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:339.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;

XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX KW reperfusion injury; ophthalmic disorder; immunological disorder;

XX KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX PD 08-APR-2004.

XX PF 25-SEP-2003; 2003WO-US030374.

XX PR 25-SEP-2002; 2002US-0413549P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Gierse JK;

XX DR WPI; 2004-305094/28.

XX FT New antisense compound, having a sequence targeted to a nucleic acid

XX FT encoding mPGES-1, useful for preparing a composition for treating e.g.,

XX FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

XX FT ischemia.

XX PS Claim 4; SEQ ID NO 339; 132pp; English.

XX CC The present sequence represents a chimeric antisense oligonucleotide

XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

XX CC human mPGES-1 gene is located on chromosome 9, more specifically to

XX CC 9q34.3. The present invention also describes: (1) antisense compounds,

XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

XX CC inhibits its expression; (2) a method of inhibiting the expression of

XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

XX CC antisense oligonucleotides and antisense compounds have cytostatic,

XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,

XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can

XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

XX CC can be used for preparing a composition for treating a disease or

XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

XX CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 503 CTGAGGGCTACCTGGAGAG 522

Db 20 CCGTGGCTACCTGGGAG 1

RESULT 2054

ADM14641

ID ADM14641 standard; DNA; 20 BP.

XX AC ADM14641;

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:828.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;

XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX KW reperfusion injury; ophthalmic disorder; immunological disorder;

XX KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX PD 08-APR-2004.

XX PF 25-SEP-2003; 2003WO-US030374.

XX PR 25-SEP-2002; 2002US-0413549P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Gierse JK;

XX DR WPI; 2004-305094/28.

XX FT New antisense compound, having a sequence targeted to a nucleic acid

XX FT encoding mPGES-1, useful for preparing a composition for treating e.g.,

XX FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

XX FT ischemia.

XX PS Claim 4; SEQ ID NO 828; 132pp; English.

XX CC The present sequence represents a chimeric antisense oligonucleotide

XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

XX CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 4 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 397 GAGGTGCAGTCTCCAGTGAG 416
 ||||| ||||| ||||| |||||
 Db 1 GAGCGGAGGCTGCAGTGAG 20

RESULT 2055

ADM14469
 ID ADM14469 standard; DNA; 20 BP.

XX ADM14469;

01-JUL-2004 (first entry)

Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:656.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1. .20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1. .5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16. .20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

(PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischaemia.

XX Claim 4; SEQ ID NO 656; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 3 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 235 GGTGGTGGCGGAGTGACCC 254
 ||||| ||||| ||||| |||||
 Db 1 GCGGAGGCTGCAGTGAGCC 20

RESULT 2056

ADM14596

ID ADM14596 standard; DNA; 20 BP.

XX ADM14596;

01-JUL-2004 (first entry)

Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:783.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1. .20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1. .5


```

FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
FT FT 15..20
FT FT /*tag= C
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
XX XX
XX PN WO2004028458-A2.
XX PN 08-APR-2004.
XX PD
XX XX
XX PF 25-SEP-2003; 2003WO-US030374.
XX PR
XX PR 25-SEP-2002; 2002US-0413549P.
XX XX
XX PA (PHAA ) PHARMACIA CORP.
XX PI
XX PI Gierse JK;
XX DR WPI; 2004-305094/28.
XX XX
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX PS Claim 4; SEQ ID NO 783; 132pp; English.
XX XX
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin H2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 4 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 232 GGTGGTGGTGGCGGAGTGA 251
Db 1 GGAGCGGAGGCTGCAGTGA 20

RESULT 2057
ADO44054/c
ID ADO44054 standard; DNA; 20 BP.
XX AC
XX AC ADO44054;
XX XX
XX DT 15-JUL-2004 (first entry)
XX DE
XX DE Nucleotide sequence of human polynucleotide #24.
XX KW hypertension; gene polymorphism; glycoprotein 1a; chemokine receptor 2;
XX KW apolipoprotein C-III; G-protein beta3 subunit;
XX KW tumour necrosis factor alpha; insulin receptor substrate 1;
XX KW glycoprotein Ibalpha; human; ss.

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XX OS Homo sapiens.
XX PN WO2004029243-A1.
XX PD
XX PD 08-APR-2004.
XX PF
XX PF 22-SEP-2003; 2003WO-JP012052.
XX PR
XX PR 25-SEP-2002; 2002JP-00280034.
XX XX
XX PA (NAGO-) NAGOYA IND SCI RES INST.
XX PA (GIFU-) GIFU INT INST BIOTECHNOLOGY.
XX PI
XX PI Yamada Y, Yokota M;
XX DR WPI; 2004-316120/29.
XX XX
XX PT Analysis of specific single polynucleotide polymorphisms in a patient for
XX PT prediction of the genetic risk of developing hypertension.
XX PS Disclosure; Page 66-101; 130pp; Japanese.
XX XX
XX CC The specification describes a method for prediction of genetic risk of
XX CC development of hypertension. The method comprises analysis the genotype
XX CC of specific gene polymorphisms in a clinical nucleic acid sample. The
XX CC gene polymorphisms analysed are one or both of the following two sets:
XX CC variation at base 1648 of glycoprotein 1a gene, variation at base 190 of
XX CC chemokine receptor 2 gene, variation at base 1100 of apolipoprotein C-III
XX CC gene, variation at base 825 of G-protein beta3 subunit gene, and
XX CC variation at base -850 of tumour necrosis factor alpha gene, variation at
XX CC base -238 of tumour necrosis factor alpha gene, variation at base 3494 of
XX CC insulin receptor substrate 1 gene, variation at base 1018 of glycoprotein
XX CC Ibalpha gene. The present sequence represents a human polynucleotide,
XX CC which is referred to in the course of the invention.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 608 TGGAGACCTACATTAAGCTG 627
Db 20 TGTAGCCCTGCATGAAGCTG 1

RESULT 2058
ADO46740
ID ADO46740 standard; DNA; 20 BP.
XX AC
XX AC ADO46740;
XX XX
XX DT 15-JUL-2004 (first entry)
XX DE
XX DE Human oligonucleotide #2106.
XX KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
XX KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
XX KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
XX KW asthma; lung allergy; inflammation; inflammatory disease;
XX KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
XX KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX KW acute respiratory distress syndrome; pulmonary hypertension;
XX KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX OS Homo sapiens.
XX PN US2004049022-A1.
XX PD
XX PD 11-MAR-2004.

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PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g. CCR1,
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
XX Claim 2; SEQ ID NO 2206; 174pp; English.
PS
XX The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC 5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1444 ATGAAACATCATCTTCCT 1463
Db 1 ATGCAAAATGCTTCTTCCT 20
RESULT 2059
ADM16234
ID ADM16234 standard; DNA; 20 BP.
XX
XX ADM16234;
AC
XX 15-JUL-2004 (first entry)
DT
XX Human SAC1 DNA PCR primer #45.
DE
XX Human; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;
KW

KW diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
XX primer.
XX Homo sapiens.
OS
XX US2004081964-A1.
PN
XX 29-APR-2004.
PD
XX
XX 25-OCT-2002; 2002US-00280183.
PF
XX 25-OCT-2002; 2002US-00280183.
PR
XX (BACH/) BACHMANOV A A.
PA (BEAU/) BEAUCHAMP G K.
PA (LISS/) LI S.
PA (LIXX/) LI X.
PA (REED/) REED D R.
PA (TORD/) TORDOFF M G.
PA (ROSS/) ROSS D A.
PA (OHMA/) OHMAN J D.
PA (CHAT/) CHATTERJEE A.
PA (DUON/) DE JONG P J.
XX
XX Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
PI Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
XX WPI; 2004-340133/31.
XX
XX New isolated polynucleotides for sensing carbohydrates, other sweeteners,
PT or ethanol, useful for screening drugs for inhibition or restoration of
PT gene function as antidiabetic, antioesity or antialcohol consumption
PT therapies.
XX
XX Example 12; SEQ ID NO 504; 148pp; English.
PS
XX The invention relates to SAC1 polypeptides and the polynucleotides
CC encoding them. The polynucleotides contain a variation associated with
CC sensing carbohydrates, other sweeteners or ethanol. The invention also
CC relates to a method for analysing a biomolecule in a biological sample,
CC comprising altering SAC1 activity in the sample and measuring the
CC activity, a method for analysing a polynucleotide in a biological sample,
CC comprising contacting a polynucleotide in a biological sample with a
CC probe where the probe hybridises to a SAC1 polynucleotide to form a
CC hybridisation complex and detecting the hybridisation complex, a method
CC of identifying susceptibility to obesity or diabetes comprising comparing
CC the nucleotide sequence of the suspected SAC1 allele with a wild type
CC nucleotide sequence, where the difference between the suspected allele
CC and the wild-type sequence identifies a sequence variation of the SAC1
CC nucleotide sequence, and a method of treating or preventing obesity,
CC diabetes or alcoholism associated with expression of SAC1, comprising
CC administering to a subject a pharmaceutical composition and a transgenic
CC animal that carries an altered SAC1 allele. The methods and compositions
CC of the invention are useful for screening drugs for inhibition or
CC restoration of gene function as antidiabetic, antioesity or antialcohol
CC consumption therapies and for identifying sweeteners and alcohols. This
CC sequence represents a PCR primer used to amplify human SAC1 DNA of the
CC invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 851 TGGACAGGACCTGAGCAG 870
Db 1 TGGAGTAGCCTGAGGCTG 20
RESULT 2060
ADN06392
ID ADN06392 standard; DNA; 20 BP.

XX AC ADN06392;
XX DT 15-JUL-2004 (first entry)
XX DE Human FLAP related microsatellite marker SEQ ID NO:40.
XX DE
XX KW leukotriene synthesis inhibitor; myocardial infarction;
XX KW acute coronary syndrome; antiatherosclerotic; cardiant; antianginal;
XX KW leukotriene biosynthesis inhibitor; leukotriene receptor antagonist;
XX KW 5-lipoxygenase activating protein; FLAP; human; chromosome 13;
XX KW chromosome 13q12; polymorphism; 5-lipoxygenase gene promoter;
XX KW 5-LO gene promoter; diabetes; hypertension; hypercholesterolemia;
XX KW obesity; inflammatory marker; low density lipoprotein; cholesterol;
XX KW high density lipoprotein; angina; atherosclerosis; microsatellite marker;
XX KW ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX PN WO2004035741-A2.
XX DE
XX PD 29-APR-2004.
XX XX
XX PF 16-OCT-2003; 2003WO-US032556.
XX XX
XX PR 17-OCT-2002; 2002US-0419433P.
XX PR 21-FEB-2003; 2003US-0449331P.
XX XX
XX PA (DECO-) DECODE GENETICS EHF.
XX PI
XX PI Heigadottir A, Gurney ME, Gulcher JR;
XX XX
XX DR WPI; 2004-357211/33.
XX XX
XX PT Use of leukotriene synthesis inhibitor for manufacture of a medicament
XX PT for treatment for myocardial infarction or susceptibility to myocardial
XX PT infarction in individual.
XX XX
XX PS Disclosure; SEQ ID NO 40; 306pp; English.
XX CC
XX CC The present invention describes using a leukotriene synthesis inhibitor
XX CC (I) for the manufacture of a medicament for the treatment of myocardial
XX CC infarction or susceptibility to myocardial infarction in an individual.
XX CC Also described is a method (M1) for the treatment of acute coronary
XX CC syndrome (ACS) in an individual comprising administering (I). (I) has
XX CC as a leukotriene biosynthesis inhibitor, and a leukotriene receptor
XX CC antagonist. (I) can be used for the manufacture of a medicament for the
XX CC treatment of myocardial infarction or susceptibility to myocardial
XX CC infarction in an individual who has at least one risk factor chosen from
XX CC the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a
XX CC FLAP nucleic acid and an at-risk polymorphism in the 5-lipoxygenase (5-
XX CC LO) gene promoter; in an individual who has at least one risk factor
XX CC chosen from diabetes, hypertension, hypercholesterolemia, elevated
XX CC ip(a), obesity, past or current smoker; in an individual having elevated
XX CC inflammatory marker chosen from C-reactive protein (CRP), serum amyloid
XX CC A, fibrinogen, leukotriene, leukotriene metabolite, interleukin-6, tissue
XX CC necrosis factor-alpha, soluble vascular cell adhesion molecule (sVCAM),
XX CC soluble intravascular adhesion molecule (sICAM), E-selectin, matrix
XX CC metalloproteinase type-1, matrix metalloproteinase type-2, matrix
XX CC metalloproteinase type-3 and matrix metalloproteinase type-9; in an
XX CC individual having increased low density lipoprotein (LDL) cholesterol
XX CC and/or decreased high density lipoprotein (HDL) cholesterol; in an
XX CC individual having increased leukotriene synthesis; in an individual
XX CC having previous myocardial infarction or acute coronary syndrome (ACS)
XX CC event, stable angina; or in an individual who has atherosclerosis or who
XX CC requires treatment to restore blood flow in arteries. (M1) is useful for
XX CC treating an individual suffering from acute coronary syndrome chosen from
XX CC unstable angina, non-ST-elevation myocardial infarction (NSTEMI) and ST-
XX CC elevation myocardial infarction (STEMI). The human FLAP gene is located
XX CC on chromosome 13, more specifically to 13q12. The present sequence

CC represents a microsatellite marker used in the exemplification of the
CC present invention.
XX
XX SQ Sequence 20 BP; 8 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 711 CAGACTGGAACTGATGAAGG 730
Db 1 CAGAGAGGAACAGGAGG 20
||||| ||||| |||||
RESULT 2061
AD054639
ID AD054639 standard; DNA; 20 BP.
XX
XX AC AD054639;
XX DT 15-JUL-2004 (first entry)
XX DE Farnesoid X receptor gene expression antisense inhibitory oligo #2012.
XX KW ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
XX KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
XX KW neuroprotective; vasotropic; antisense; gene therapy;
XX KW Farnesoid X receptor; diabetes; immunological disorder;
XX KW cardiovascular disorder; dyslipidemia; atherosclerosis;
XX KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
XX KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
XX KW ischemia; reperfusion; diagnostics; prophylaxis.
XX OS Homo sapiens.
XX XX
XX PN WO2004030750-A1.
XX XX
XX PD 15-APR-2004.
XX XX
XX PF 25-SEP-2003; 2003WO-US030353.
XX XX
XX PR 25-SEP-2002; 2002US-0413588P.
XX PA (PHAA) PHARMACIA CORP.
XX PI Kane CD;
XX XX
XX WPI; 2004-347928/32.
XX New antisense oligonucleotides useful for modulating expression of
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
XX e.g. diabetes, immunological disorders, cardiovascular disorders,
XX gallstones or obesity.
XX Claim 4; SEQ ID NO 1012; 150pp; English.
XX
XX CC The invention relates to an antisense compound 8-30 nucleobases in length
XX CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
XX CC where the antisense compound specifically hybridizes with and inhibits
XX CC the expression of FXR. The composition and methods are useful for
XX CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
XX CC tissues, or for treating diseases or conditions associated with FXR, such
XX CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
XX CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
XX CC lipoprotein), elevated LDL (low density lipoprotein) or
XX CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
XX CC neurological disorders, or ischemia/reperfusion injury. In addition, the
XX CC composition is used for diagnostics, prophylaxis, or as research reagents
XX CC or kits. This sequence corresponds to an antisense oligonucleotide of the
XX CC invention.
XX SQ Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 794 TTACGCTACATGACATTATC 813
Db 1 TTACTCTCCATGACATCAGC 20

RESULT 2062
ADP18306
ID ADP18306 standard; DNA; 20 BP.
XX
AC ADP18306;
XX
DT 29-JUL-2004 (first entry)
XX
DE STEAP gene antisense primer seqid 48.
XX
KW cytostatic; senescence; cell proliferation; neoplastic cell growth;
KW cellular gene expression; reverse transcriptase PCR; RT-PCR; primer; ss;
KW doxorubicin-induced senescence; HCT 116 cell; human.
XX
OS Homo sapiens.
XX
PN US2004058320-A1.
XX
PD 25-MAR-2004.
XX
PF 21-DEC-2001; 2001US-00032264.
XX
PR 21-DEC-2000; 2000US-0257907P.
PR 17-DEC-2001; 2001US-0341425P.
XX
PA (RONI/) RONINSON I B.
PA (CHAN/) CHANG B.
XX
PI Roninsson IB, Chang B;
XX
DR WPI; 2004-294237/27.
XX
PT Identifying a compound that induces senescence in a mammalian cell,
PT useful for treating abnormal cell proliferation, comprises assaying
PT expression of a cellular gene in the cell in the presence and in the
PT absence of a compound.
XX
PS Example 2; SEQ ID NO 48; 29pp; English.
XX
CC The invention describes a method of identifying a compound that induces
CC senescence in a mammalian cell. The method comprises: culturing the
CC mammalian cell in the presence and absence of the compound; assaying
CC expression of at least one cellular gene selected from 73 genes given in
CC the specification, in the cell in the presence and in the absence of the
CC compound; and identifying compounds that induce senescence when
CC expression of at least one of the cellular gene is higher in the presence
CC of the compound than in the absence of the compound. Also described are:
CC a compound that induces senescence in a mammalian cell identified from
CC the method above; assessing efficacy of a treatment of a disease or
CC condition relating to abnormal cell proliferation or neoplastic cell
CC growth; and identifying a compound that inhibits senescence-associated
CC induction of cellular gene expression. Compounds that induce senescence
CC in abnormally proliferating or neoplastic cells are useful for treating a
CC disease or condition relating to abnormal cell proliferation or
CC neoplastic cell growth. This sequence represents a reverse transcriptase
CC PCR primer used to identify genes induced and repressed following
CC doxorubicin-induced senescence of HCT 116 cells.
XX
SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGACTGCTGA 67
Db 1 ACCATGAGTGTGATGCTGA 20

RESULT 2063
ADO56095/c
ID ADO56095 standard; DNA; 20 BP.
XX
AC ADO56095;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cyclin-dependent kinase 6, antisense oligonucleotide #159.
XX
KW antisense therapy; cyclin-dependent kinase 6;
KW hyperproliferative disorder; cancer; bacterial infection;
KW viral infection; apoptosis; ss; probe; human.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone. All cytidines are 5'-
FT methylcytidines."
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004087523-A1.
XX
PD 06-MAY-2004.
XX
PF 31-JUL-2002; 2002US-00210802.
XX
PR 31-JUL-2002; 2002US-00210802.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Dobie KW;
XX
DR WPI; 2004-356241/33.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT cancer, bacterial/viral infection or conditions involving aberrant
PT apoptosis.
XX
PS Example 15; Page 31; 68pp; English.
XX
CC The invention relates to antisense oligonucleotides targeted to cyclin-
CC dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC kinase 6. The antisense oligonucleotides are useful for treating a
CC disease or condition associated with cyclin-dependent kinase 6, such as a
CC hyperproliferative disorder (e.g. cancer), or conditions arising from
CC bacterial or viral infections, or involving aberrant apoptosis. They are
CC also useful in research and diagnostics for modulating the expression of
CC cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC used in the sequence listing but these sequences do not match seqid 15-
CC 134 displayed in Tables 1 and 2 (page 30-34).
XX
SQ Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1084 GAGGTGGTGACACTGTGGTA 1103
Db 20 GTGGTCGTCACCTGTGGTA 1

RESULT 2064
ADN89165/c
ID ADN89165 standard; DNA; 20 BP.
XX
AC ADN89165;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human G-protein coupled receptor GPR43 gene forward PCR primer.
XX
KW ss; primer; antianemic; hemostatic; cardiant; antiarrhythmic;
KW antiarteriosclerotic; antiparkinsonian; nootropic; neuroprotective;
KW cerebroprotective; vasotropic; antiasthmatic; anti-inflammatory;
KW dermatological; immunosuppressive; muscular; antidiabetic; antirheumatic;
KW antiarthritic; antipsoriatic; uropathic; cardiovascular; CNS;
KW gastrointestinal; cytostatic; gene therapy;
KW G protein-coupled receptor 43; GPR43; hematological disease;
KW cardiovascular disease; peripheral nervous system disorder;
KW central nervous system disorder; gastroenterological disease;
KW inflammation; cancer; urological disease; anemia;
KW myeloproliferative disorder; hemorrhagic disorder; leukemia;
KW myocardial infarction; arrhythmia; atherosclerosis; Parkinson's disease;
KW dementia; multiple sclerosis; stroke; Alzheimer's disease;
KW Pick's disease; dysphagia; jaundice; intrahepatic cholestatis;
KW hepatomegaly; asthma; systemic lupus erythematosus; myasthenia gravis;
KW diabetes; rheumatoid arthritis; psoriasis; scleroderma;
KW urinary incontinence; erectile dysfunction; pelvic pain.
XX
OS Homo sapiens.
XX
FN WO2004038405-A2.
XX
PD 06-MAY-2004.
XX
XX
PF 13-OCT-2003; 2003WO-EP011314.
XX
XX
PR 25-OCT-2002; 2002EP-00023796.
XX
XX
PA (FARB) BAYER HEALTHCARE AG.
XX
PI Golz S, Brueggemeier U, Summer H;
XX
XX
DR WPI; 2004-399994/37.
XX
XX
PT Use of G protein-coupled receptor 43 polypeptide for diagnosing or
PT treating, e.g. anemia, leukemia, myocardial infarction, atherosclerosis,
PT multiple sclerosis, stroke, asthma, diabetes, or rheumatoid arthritis.
XX
XX
PS Example 2; SEQ ID NO 3; 122pp; English.
XX
XX
CC The invention relates to the use of a G protein-coupled receptor 43
CC (GPR43) polypeptide for diagnosing or treating hematological diseases,
CC cardiovascular diseases, disorders of the peripheral and central nervous
CC system, gastroenterological diseases, inflammation, cancer diseases or
CC urological diseases. The GPR43 polypeptide is useful for diagnosing or
CC treating hematological diseases, cardiovascular diseases, disorders of
CC the peripheral and central nervous system, gastroenterological diseases,
CC inflammation, cancer diseases or urological diseases. Diseases include
CC anemia, myeloproliferative disorders, hemorrhagic disorders, leukemia,
CC myocardial infarction, arrhythmias, atherosclerosis, Parkinson's disease,
CC dementia, multiple sclerosis, stroke, Alzheimer's disease, Pick's
CC disease, dysphagia, jaundice, intrahepatic cholestatis, hepatomegaly,
CC asthma, systemic lupus erythematosus, myasthenia gravis, diabetes,
CC rheumatoid arthritis, psoriasis, scleroderma, urinary incontinence,
CC erectile dysfunction or pelvic pain. This sequence represents the forward
CC PCR primer to amplify the GPR43 gene of the invention.

XX
SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAACGG 150
Db 20 GGATGAAGAAGACACCAGG 1

RESULT 2065
AD016592/c
ID AD016592 standard; DNA; 20 BP.
XX
AC AD016592;
XX
DT 29-JUL-2004 (first entry)
XX
DE 4 synthesis-period of neuroblastoma related primer, SEQ ID 854.
XX Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.
XX Synthetic.
XX WO2004039975-A1.
XX
PD 13-MAY-2004.
XX
PF 30-OCT-2003; 2003WO-JP013932.
XX
PR 30-OCT-2002; 2002JP-00316596.
XX
PA (HISM) HISAMITSU PHARM CO LTD.
PA (CHIB-) CHIBA PREFECTURE.
XX
PI Nakagawara A, Ohira M;
XX
DR WPI; 2004-390323/36.
XX
PT Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma
PT cells useful for prognosing and determining progress stage of
PT neuroblastomas.
XX
PS Claim 8; SEQ ID NO 854; 455pp; Japanese.
XX
CC The present invention relates to human nucleic acid sequences (I;
CC AD015739-AD015912) obtained from 4 synthesis-period (stage 4S) of
CC neuroblastoma cell. (I) is useful for prognosing and determining the
CC progress stage of 4 synthesis-period of neuroblastoma. The present
CC sequence is a primer, used to illustrate the invention.
XX
SQ Sequence 20 BP; 1 A; 4 C; 7 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 815 ACACGGAGAGATCCCTCACC 834
Db 20 ACACGGAGAGACCTCAAC 1

RESULT 2066
ADN30006
ID ADN30006 standard; DNA; 20 BP.
XX
AC ADN30006;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human huntingtin interacting protein 2 DNA target region #17.

```
XX Human; huntingtin interacting protein 2; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; neurodegenerative disorder; neuroprotective.
XX
OS Homo sapiens.
XX
PN US2004102394-A1.
XX
PD 27-MAY-2004.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean NM, Dobie KW;
XX
XX WPI; 2004-399724/37.
XX
XX New compound targeted to a nucleic acid molecule encoding huntingtin
PT interacting protein 2 and inhibits the expression of huntingtin
PT interacting protein 2, useful for modulating the expression of huntingtin
PT interacting protein 2.
XX
XX Example 15; SEQ ID NO 64; 35pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding human huntingtin interacting protein 2. The compound is an
CC antisense oligonucleotide that specifically hybridizes with the nucleic
CC acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the human huntingtin interacting
CC protein 2 polypeptide and in preparation of a composition for treating
CC neurodegenerative disorders. This sequence represents an antisense
CC oligonucleotide target region of the invention.
XX
XX Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 582 CCTATCTGAGATTGGCTTTG 601
Db 1 CCTATGCTATGGGCTTTG 20
RESULT 2067
ADN29980/c
ID ADN29980 standard; DNA; 20 BP.
XX
XX ADN29980;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human huntingtin interacting protein 2 DNA antisense oligonucleotide #28.
XX
XX Human; huntingtin interacting protein 2; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; neurodegenerative disorder; neuroprotective.
XX
OS Homo sapiens.
XX
PN US2004102394-A1.
XX
PD 27-MAY-2004.
XX
XX 23-NOV-2002; 2002US-00303292.
XX
PF
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XX 23-NOV-2002; 2002US-00303292.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean NM, Dobie KW;
XX
XX WPI; 2004-399724/37.
XX
XX New compound targeted to a nucleic acid molecule encoding huntingtin
PT interacting protein 2 and inhibits the expression of huntingtin
PT interacting protein 2, useful for modulating the expression of huntingtin
PT interacting protein 2.
XX
XX Example 15; SEQ ID NO 38; 35pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding human huntingtin interacting protein 2. The compound is an
CC antisense oligonucleotide that specifically hybridizes with the nucleic
CC acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the human huntingtin interacting
CC protein 2 polypeptide and in preparation of a composition for treating
CC neurodegenerative disorders. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human huntingtin interacting
CC protein 2 of the invention.
XX
XX Sequence 20 BP; 8 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 582 CCTATCTGAGATTGGCTTTG 601
Db 20 CCTATGCTATGGGCTTTG 1
RESULT 2068
AD052162/c
ID AD052162 standard; DNA; 20 BP.
XX
XX AD052162;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human inhibitor of apoptosis-like antisense oligonucleotide seqid 36.
XX
XX cytostatic; gene therapy; inhibitors of apoptosis-like; IAP-like;
KW IAP-like modulator; IAP-like associated disorder;
KW hyperproliferative disorder; human; antisense oligonucleotide;
KW antisense technology; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
```


KW 20-alpha-HSD; CCR2; PCR.
 XX Mus sp.
 OS JP2004147534-A.
 XX 27-MAY-2004.
 XX 29-OCT-2002; 2002JP-00314957.
 XX 29-OCT-2002; 2002JP-00314957.
 XX (NISHI) NISHIMURA T.
 XX (TORA) TORAY IND INC.
 XX WPI; 2004-434540/41.
 XX Novel Mm28913 and Mm20021 nucleic acid sequences encoding protein with
 PT immunoregulation activity, useful for evaluating ratio of Th1/Th2 helper
 PT T cells.
 XX Example 6; SEQ ID NO 78; 140pp; Japanese.
 XX This invention relates to a novel gene identified as Mm28913 and the
 CC encoded protein thereof that is involved in immunoregulation activity.
 CC Specifically, it refers to a method to test for the immunity balance or
 CC ratio between Th1 and Th2 helper T cells. The present invention describes
 CC the target helper T cell proteins that are activated or suppressed by
 CC Th1/Th2, and include the Th1 targets C/EBP (alpha), GATA-4, Notch-4, IRS-
 CC 4, placental Ca2+ binding protein, CD6, Galactin-3, CD97, DEC1, Onzin,
 CC GSP3, CD49b, CD29 and BMP-10, whereas the functional molecules of the Th2
 CC lymphocyte include integrin(beta)7, PCSK3, GP49A, CTLA-2(alpha), TDAG51,
 CC CD53, laminin(alpha)5, PPAR(gamma), ECM1, CRABP2, CYP11A(P450scc),
 CC 20(alpha)-hydroxysteroid dehydrogenase (20-alpha-HSD) and CCR2.
 CC Accordingly, the method further involves using the gene of the functional
 CC molecule of helper T cell, a gene product, an antibody of the gene
 CC product and at least one of the cells transduced with the gene as an
 CC index to evaluate the Th1/Th2 ratio. This oligonucleotide sequence is an
 CC RT-PCR primer used to amplify the murine cDNA sequence of a Th2 helper T
 CC cell functional molecule of the invention.
 XX
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1702 TCTCTGCTACCTGCTGAG 1721
 DB 1 TCTGTGAGGATCTGCTGAG 20
 RESULT 2071
 ADP79132
 ID ADP79132 standard; DNA; 20 BP.
 XX AC ADP79132;
 XX 12-AUG-2004 (first entry)
 XX Chimeric phosphorothioate oligonucleotide #2931.
 DE GPAT; Antidiabetic; Cardiant;
 XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
 KW reperfusion; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 XX modified_base 1..4
 FT /*tag= a
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT

FT modified_base 17..20
 FT /*tag= b
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 XX WO2004035763-A2.
 XX 29-APR-2004.
 XX 02-OCT-2003; 2003WO-US033332.
 XX 17-OCT-2002; 2002US-0419268P.
 XX (PHAA) PHARMACIA CORP.
 XX Broschat KO, Crosby SD;
 XX WPI; 2004-348453/32.
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
 PT (GPAT), for treating diabetes, a cardiovascular or neurologic disorder,
 PT ischemia/reperfusion injury.
 XX Claim 4; SEQ ID NO 2931; 175pp; English.
 XX The present invention relates to a compound which specifically hybridizes
 CC with a nucleic acid molecule encoding GPAT, and inhibits the expression
 CC of GPAT. Specifically claimed are antisense oligonucleotides capable of
 CC modulating the expression of GPAT, and which comprise any of the 3063
 CC sequences of 20 base pairs, given in the specification. The compound,
 CC composition and methods are useful for treating a disease or condition
 CC associated with GPAT, such as a disease or condition, e.g. diabetes, a
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
 CC They are also useful in research and diagnostics for modulating the
 CC expression of GPAT. The present sequence represents a chimeric
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
 CC oligonucleotides inhibit human GPAT expression.
 XX Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 881 ACTGTGGGACATCATCAAC 900
 DB 1 ACTGTGCAACATCATCATC 20
 RESULT 2072
 ADP77712
 ID ADP77712 standard; DNA; 20 BP.
 XX AC ADP77712;
 XX 12-AUG-2004 (first entry)
 XX Chimeric phosphorothioate oligonucleotide #1511.
 DE GPAT; Antidiabetic; Cardiant;
 XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
 KW reperfusion; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 XX modified_base 1..4
 FT /*tag= a
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT modified_base 17..20
 FT /*tag= b
 FT


```
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
PN WO2004035763-A2.
XX 29-APR-2004.
XX 02-OCT-2003; 2003WO-US033332.
XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.
XX Broschat KO, Crosby SD;
XX WPI; 2004-348453/32.
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT ischemia/reperfusion injury.
XX Claim 4; SEQ ID NO 1511; 175pp; English.
XX The present invention relates to a compound which specifically hybridizes
CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC modulating the expression of GFAT, and which comprise any of the 3063
CC sequences of 20 base pairs, given in the specification. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC They are also useful in research and diagnostics for modulating the
CC expression of GFAT. The present sequence represents a chimeric
CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC oligonucleotides inhibit human GFAT expression.
XX Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1065 AACAAAGACATACCTCAATG 1084
Db 1 ACAGAGTATATCTCCACTG 20
RESULT 2073
ADP76327
ID ADP76327 standard; DNA; 20 BP.
XX AC ADP76327;
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #126.
XX GFAT; Antidiabetic; Cardiant;
KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW reperfusion; ss.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..4
FT /tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
```

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XX WO2004035763-A2.
XX 29-APR-2004.
XX 02-OCT-2003; 2003WO-US033332.
XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.
XX Broschat KO, Crosby SD;
XX WPI; 2004-348453/32.
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT ischemia/reperfusion injury.
XX Claim 4; SEQ ID NO 126; 175pp; English.
XX The present invention relates to a compound which specifically hybridizes
CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC modulating the expression of GFAT, and which comprise any of the 3063
CC sequences of 20 base pairs, given in the specification. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC They are also useful in research and diagnostics for modulating the
CC expression of GFAT. The present sequence represents a chimeric
CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC oligonucleotides inhibit human GFAT expression.
XX Sequence 20 BP; 3 A; 4 C; 10 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 224 ATCAGAGTGGTGGTGGTGC 243
Db 1 ATCAGAGCGCTGGGGTGGC 20
RESULT 2074
ADP77744
ID ADP77744 standard; DNA; 20 BP.
XX AC ADP77744;
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #1543.
XX GFAT; Antidiabetic; Cardiant;
KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW reperfusion; ss.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..4
FT /tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20
FT /tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
PN WO2004035763-A2.
```

```
XX PD 29-APR-2004.
XX PF
XX XX
XX PF 02-OCT-2003; 2003WO-US033332.
XX PR
XX XX
XX PR 17-OCT-2002; 2002US-0419268P.
XX PA
XX XX (PHAA ) PHARMACIA CORP.
XX PI
XX PI Broschat KO, Crosby SD;
XX XX
XX WPI; 2004-348453/32.
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX XX
XX PS Claim 4; SEQ ID NO 1543; 175pp; English.
XX XX
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition,
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX XX
XX SQ Sequence 20 BP; 6 A; 9 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1184 AGATGGCCACAGCGCGTCC 1203
Db 1 AATATTACCACAGCGCGCCC 20
RESULT 2075
ADP76938
ID ADP76938 standard; DNA; 20 BP.
XX AC
XX AC ADP76938;
XX DT
XX DT 12-AUG-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide #737.
XX XX
XX KW GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS
XX OS Synthetic.
XX PH
XX PH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN
XX PN WO2004035763-A2.
XX PD
XX PD 29-APR-2004.
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XX XX
XX PF 02-OCT-2003; 2003WO-US033332.
XX PR
XX XX
XX PR 17-OCT-2002; 2002US-0419268P.
XX XX
XX PA (PHAA ) PHARMACIA CORP.
XX XX
XX PI Broschat KO, Crosby SD;
XX XX
XX WPI; 2004-348453/32.
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX XX
XX PS Claim 4; SEQ ID NO 737; 175pp; English.
XX XX
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition,
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX XX
XX SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1145 CTCAGATTGACATGTGGGGT 1164
Db 1 CTCAGATTGAATGGAGGGT 20
RESULT 2076
ADP77889
ID ADP77889 standard; DNA; 20 BP.
XX AC
XX AC ADP77889;
XX DT
XX DT 12-AUG-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide #1688.
XX XX
XX KW GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS
XX OS Synthetic.
XX PH
XX PH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN
XX PN WO2004035763-A2.
XX PD
XX PD 29-APR-2004.
XX PF 02-OCT-2003; 2003WO-US033332.
```

```
XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.
XX PI Broschat KO, Crosby SD;
XX DR WPI; 2004-348453/32.
XX DR
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 168; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 889 AACATCATCAACATGCACAA 908
DB 1 AACATCATCATCTTCAGAA 20
RESULT 2077
ADP76369/c
ID ADP76369 standard; DNA; 20 BP.
XX AC ADP76369;
XX DT 12-AUG-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide #168.
XX KW GFAT; Antidiabetic; Cardiant;
XX KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX KW reperfusion; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..4
XX FT /*tag= a
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX FT modified_base 17..20
XX FT /*tag= b
XX FT /mod_base= other
XX FT /note= "2-methoxyethyl wing"
XX PN WO2004035763-A2.
XX PD 29-APR-2004.
XX PF 02-OCT-2003; 2003WO-US033332.
XX XX
XX PR 17-OCT-2002; 2002US-0419268P.
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XX (PHAA ) PHARMACIA CORP.
XX PI Broschat KO, Crosby SD;
XX DR WPI; 2004-348453/32.
XX DR
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX PT ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 168; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX CC modulating the expression of GFAT, and which comprise any of the 3063
XX CC sequences of 20 base pairs, given in the specification. The compound,
XX CC composition and methods are useful for treating a disease or condition
XX CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX CC They are also useful in research and diagnostics for modulating the
XX CC expression of GFAT. The present sequence represents a chimeric
XX CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX CC oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 126 GCATCGATGAAGAAGATCA 145
DB 20 GCATCGATGAAGAAGTTCA 1
RESULT 2078
ADP11969/c
ID ADP11969 standard; DNA; 20 BP.
XX AC ADP11969;
XX DT 12-AUG-2004 (first entry)
XX DE Set 2 right PCR primer for marker probe #75.
XX KW transplant rejection; immune system; rheumatoid arthritis; lupus;
XX KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX OS Homo sapiens.
XX PN WO2004042346-A2.
XX PD 21-MAY-2004.
XX PF 24-APR-2003; 2003WO-US012946.
XX XX
XX PR 24-APR-2002; 2002US-00131831.
XX PR 20-DEC-2002; 2002US-00325899.
XX PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX XX
XX PI Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX PI Rosenberg S;
XX DR WPI; 2004-400724/37.
XX XX
XX PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX PT rejection, in an individual, comprises detecting the expression level of
XX PT the genes.
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XX PS Claim 58; SEQ ID NO 1978; 1762pp; English.
XX
CC The present invention relates to diagnosing or monitoring transplant
CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprises detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection,
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC of allograft rejection and other disorders.
XX
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 757 GTGTCCTGCTCAAGGACCT 776
Db 20 GTGACCAGCTCAAGGCCT 1
RESULT 2079
ADP11349/C
ID ADP11349 standard; DNA; 20 BP.
XX
AC ADF11349;
XX
XX 12-AUG-2004 (first entry)
XX
DE Tagman probe of the invention #32.
XX
XX transplant rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
XX
OS Homo sapiens.
XX
XX WO2004042346-A2.
XX
XX 21-MAY-2004.
XX
XX 24-APR-2003; 2003WO-US012946.
XX
XX 24-APR-2002; 2002US-00131831.
XX
XX 20-DEC-2002; 2002US-00325899.
XX
XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
XX Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;
XX
XX WPI; 2004-400724/37.
XX
XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of
XX the genes.
XX
XX Claim 58; SEQ ID NO 1359; 1762pp; English.
XX
XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprises detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
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CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC Tagman probe for a 50 mer oligonucleotide marker for diagnosis and
CC monitoring of allograft rejection and other disorders.
XX
SQ Sequence 20 BP; 1 A; 9 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 41 CAGCAGGACCCAGCGGTGA 60
Db 20 CAGGAGGGCCCCCAGGGTGA 1
RESULT 2080
ADP11839/C
ID ADP11839 standard; DNA; 20 BP.
XX
AC ADF11839;
XX
XX 12-AUG-2004 (first entry)
XX
DE Set 2 left PCR primer for marker probe #191.
XX
XX transplant rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS Homo sapiens.
XX
XX WO2004042346-A2.
XX
XX 21-MAY-2004.
XX
XX 24-APR-2003; 2003WO-US012946.
XX
XX 24-APR-2002; 2002US-00131831.
XX
XX 20-DEC-2002; 2002US-00325899.
XX
XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
XX Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;
XX
XX WPI; 2004-400724/37.
XX
XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of
XX the genes.
XX
XX Claim 58; SEQ ID NO 1848; 1762pp; English.
XX
XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprises detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
XX xenotransplant rejection or mechanical organ replacement rejection, in an
XX individual. The method is also useful in assessing the immune status of
XX an individual. The methods are also useful in diagnosing and monitoring
XX diseases that involve the immune system, e.g. rheumatoid arthritis,
XX lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
XX viral, bacterial or fungal infection. The present sequence represents a
XX primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
XX of allograft rejection and other disorders.
XX
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SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 344 TGAAGATGGGCTGTGATGGG 363
Db 20 TGAATGGGATCTGAGGG 1

RESULT 2081
ADN48571/c
ID ADN48571 standard; DNA; 20 BP.
AC ADN48571;
XX
XX
XX 12-AUG-2004 (first entry)
DT
XX
XX Human Notch3 DNA antisense oligonucleotide #15.
DE
DE Human; Notch3; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
XX Homo sapiens.
OS
XX
XX US2004102390-A1.
PN
XX
XX 27-MAY-2004.
PD
XX
XX 21-NOV-2002; 2002US-00301832.
PF
XX
XX 21-NOV-2002; 2002US-00301832.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Dobie KW;
PI
XX
XX WPI; 2004-399720/37.
DR
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding Notch3, useful for treating diseases associated with Notch3,
PT e.g. hyperproliferative disorders.
PT
XX
XX Example 15; SEQ ID NO 26; 74pp; English.
PS
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human Notch3 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human Notch3 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a human Notch3 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 547 GACAGCCCTCAGCCGCG 566
Db 20 GACAGTACCTCTGCGCTG 1

RESULT 2082
ADN48648
ID ADN48648 standard; DNA; 20 BP.
AC ADN48648;
XX
XX
XX 12-AUG-2004 (first entry)
DT
XX
XX Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 52.
DE
DE apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
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ID ADN48648 standard; DNA; 20 BP.
XX
AC ADN48648;
XX
XX 12-AUG-2004 (first entry)
DT
XX
XX Human Notch3 DNA antisense oligonucleotide target region #14.
DE
DE Human; Notch3; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
XX Homo sapiens.
OS
XX
XX US2004102390-A1.
PN
XX
XX 27-MAY-2004.
PD
XX
XX 21-NOV-2002; 2002US-00301832.
PF
XX
XX 21-NOV-2002; 2002US-00301832.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Dobie KW;
PI
XX
XX WPI; 2004-399720/37.
DR
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding Notch3, useful for treating diseases associated with Notch3,
PT e.g. hyperproliferative disorders.
PT
XX
XX Example 15; SEQ ID NO 103; 74pp; English.
PS
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human Notch3 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human Notch3 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a human Notch3 DNA antisense
CC oligonucleotide target region of the invention.
XX
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 547 GACAGCCCTCAGCCGCG 566
Db 1 GACAGTACCTCTGCGCTG 20

RESULT 2083
ADO32604/c
ID ADO32604 standard; DNA; 20 BP.
XX
XX
XX ADO32604;
AC
XX
XX 12-AUG-2004 (first entry)
DT
XX
XX Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 52.
DE
DE apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
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RESULT 2085
AD055856
ID ADO55856 standard; DNA; 20 BP.
XX
AC ADO55856;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human NIMA-related kinase 6 DNA target sequence #10.
XX
DE Antisense therapy; human; NIMA-related kinase 6;
XX never in mitosis gene a-related kinase 6; hyperproliferative disorder;
XX cancer; cytostatic; ds.
XX
OS Homo sapiens.
XX
US2004097441-A1.
XX
PD 20-MAY-2004.
XX
PF 16-NOV-2002; 2002US-00295471.
XX
PR 16-NOV-2002; 2002US-00295471.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
WPI; 2004-389184/36.
XX
New antisense oligonucleotides for modulating never in mitosis, gene a
PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
PT treating diseases associated with the kinase, e.g. hyperproliferative
PT disorders.
XX
Example 15; SEQ ID NO 102; 51pp; English.
XX
The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human never in mitosis gene a-related kinase 6
CC (NIMA-related kinase 6). The antisense compound comprises an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits the expression of NIMA-related kinase 6. The antisense
CC oligonucleotide is a chimeric oligonucleotide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC preferably a phosphorothioate linkage. It also comprises at least one
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
CC moiety. The antisense oligonucleotide further comprises at least one
CC modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer. The present sequence
CC represents a human NIMA-related kinase 6 DNA target sequence for an
CC antisense oligonucleotide.
XX
Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 17 GATGACACGGAATGACAGG 36
DB 1 GCTGGACAGGAAGACAGTGG 20
RESULT 2086
ADP27221/c
ID ADP27221 standard; DNA; 20 BP.
XX
AC ADP27221;
XX
DT 26-AUG-2004 (first entry)
XX
DE Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #52.
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```
XX
KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS Rattus norvegicus.
XX
US2004110152-A1.
XX
PD 10-JUN-2004.
XX
PF 10-DEC-2002; 2002US-00316755.
XX
PR 10-DEC-2002; 2002US-00316755.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
WPI; 2004-440341/41.
XX
New oligonucleotide compound that inhibits expression of matrix
PT metalloproteinase 11, useful for preparing a composition for treating
PT hyperproliferative disorder, e.g., cancer.
XX
Example 16; SEQ ID NO 147; 76pp; English.
XX
The invention relates to a compound targeted to a nucleic acid molecule
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
CC is an antisense oligonucleotide that specifically hybridises with the
CC nucleic acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the MMP11 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents an antisense oligonucleotide
CC targeted to DNA encoding the rat MMP11 polypeptide of the invention.
XX
Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1452 TCCATTCTTCTCAGTCTGG 1471
DB 20 TCCATGCTGCTTGTCTGG 1
RESULT 2087
ADP95955
ID ADP95955 standard; DNA; 20 BP.
XX
AC ADP95955;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human GAPDH primer #2.
XX
KW hematopoietic cancer; wingless-related MMTV integration site 5a; Wnt5a;
KW Cytostatic; chronic myeloid; lymphoblast leukemia; lymphoma; ss;
KW primer.
XX
OS Homo sapiens.
XX
WO2004047757-A2.
XX
PD 10-JUN-2004.
XX
PF 20-NOV-2003; 2003WO-US037594.
XX
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RESULT 2090
ADP44451/c
ID ADP44451 standard; DNA; 20 BP.
XX
AC ADP44451;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human ABCC5 DNA antisense oligonucleotide #67.
XX
KW Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004115649-A1.
XX
PD 17-JUN-2004.
XX
PF 12-DEC-2002; 2002US-00319893.
XX
PR 12-DEC-2002; 2002US-00319893.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
WPI; 2004-449386/42.
XX
New oligonucleotide compound that inhibits expression of ABCC5, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
PS Example 15; SEQ ID NO 77; 57pp; English.
XX
The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human ABCC5 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human ABCC5 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents an antisense oligonucleotide
CC targeted to DNA encoding the human ABCC5 polypeptide of the invention.
XX
SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1381 GCCGACCTCTCCACCAAGCT 1400
Db 20 GCCGACCTCCGAAGCAAACT 1
RESULT 2091
ADP68428
ID ADP68428 standard; DNA; 20 BP.
XX
AC ADP68428;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human STAT 6 antisense oligonucleotide ISIS153785.
XX
KW Human; ss; antisense; STAT 6;
KW signal transducer and activator of transcription; transcription factor;
KW rheumatoid arthritis; obesity; allergy; autoimmune disorder;
KW chromosome 12q13.
XX
OS Homo sapiens.
XX
Key Location/Qualifiers
modified_base 1..20
/*tag= b
/mod_base= OTHER
/*note= "phosphorothioate backbone and all cytidines are 5
-methylcytidines"
FT modified_base 1..5
/*tag= a
/mod_base= OTHER
/*note= "2'-methoxyethyl residue"
FT modified_base 16..20
/*tag= c
/mod_base= OTHER
/*note= "2'-methoxyethyl residue"
XX
US2004115634-A1.
XX
PD 17-JUN-2004.
XX
PF 11-DEC-2002; 2002US-00317391.
XX
PR 11-DEC-2002; 2002US-00317391.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Shanahan WR, Freier SM, Dobie KW;
XX
WPI; 2004-449375/42.
XX
New oligonucleotide compound that inhibits expression of STAT 6, useful
PT for preparing a composition for treating e.g. autoimmune disorders.
XX
PS Example 15; SEQ ID NO 35; 64pp; English.
XX
The invention relates to a compound (e.g. an antisense oligonucleotide),
CC having a sequence comprising 8-80 bp targeted to a nucleic acid encoding
CC STAT 6 (signal transducer and activator of transcription 6, a
CC transcription factor implicated in rheumatoid arthritis, obesity and
CC allergy), specifically hybridises with the nucleic acid encoding STAT 6
CC appearing as ADP68397 and inhibits expression of STAT 6. Also included
CC are a method of inhibiting the expression of STAT 6 in cells or tissues,
CC a method of screening for a modulator of STAT 6, a diagnostic method for
CC identifying a disease state, a kit or assay device comprising the
CC compound and a method of treating an animal having a disease or condition
CC associated with STAT 6. The oligonucleotide compound is useful for
CC preparing a composition for treating autoimmune disorder, rheumatoid
CC arthritis, allergy or obesity. The gene for STAT 6 is located on
CC chromosome 12q13. The present sequence is an antisense oligonucleotide
CC targeting STAT 6.
XX
SQ Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1560 GTCGATGCCTGCTCAGGCA 1579
Db 1 GTCAGCTGGCTGGCTCAGGCA 20
RESULT 2092
ADP68496/c
ID ADP68496 standard; cDNA; 20 BP.
XX
AC ADP68496;
XX
```

```

DT 09-SEP-2004 (first entry)
XX Human STAT 6 antisense target region #17.
DE
XX
XX Human; ss; antisense; STAT 6;
KW signal transducer and activator of transcription; transcription factor;
KW rheumatoid arthritis; obesity; allergy; autoimmune disorder;
KW chromosome 12q13.
XX
XX Homo sapiens.
OS
XX
XX US2004115634-A1.
PN
XX
XX 17-JUN-2004.
PD
XX
XX 11-DEC-2002; 2002US-00317391.
PF
XX
XX 11-DEC-2002; 2002US-00317391.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Shanahan WR, Freier SM, Dobie KW;
PI WPI; 2004-449375/42.
XX
XX New oligonucleotide compound that inhibits expression of STAT 6, useful
PT for preparing a composition for treating e.g. autoimmune disorders.
PT
XX
XX Example 15; SEQ ID NO 103; 64pp; English.
PS
XX The invention relates to a compound (e.g. an antisense oligonucleotide),
CC having a sequence comprising 8-80 bp targeted to a nucleic acid encoding
CC STAT 6 (signal transducer and activator of transcription 6, a
CC transcription factor implicated in rheumatoid arthritis, obesity and
CC allergy), specifically hybridises with the nucleic acid encoding STAT 6
CC appearing as ADP68397 and inhibits expression of STAT 6. Also included
CC are a method of inhibiting the expression of STAT 6 in cells or tissues,
CC a method of screening for a modulator of STAT 6, a diagnostic method for
CC identifying a disease state, a kit or assay device comprising the
CC compound and a method of treating an animal having a disease or condition
CC associated with STAT 6. The oligonucleotide compound is useful for
CC preparing a composition for treating autoimmune disorder, rheumatoid
CC arthritis, allergy or obesity. The gene for STAT 6 is located on
CC chromosome 12q13. The present sequence is a STAT 6 cDNA target sequence
CC for the antisense oligonucleotides of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1560 GTCGATGCGCTGACTCAGGCA 1579
DB |||||
20 GTCAGTGGCTGGCTCAGGCA 1
RESULT 2093
ADP66874
ID ADP66874 standard; DNA; 20 BP.
XX
XX ADP66874;
AC
XX
XX 09-SEP-2004 (first entry)
DT
XX Mouse endothelial lipase antisense oligonucleotide seqid 130.
DE
XX
XX antisense therapy; endothelial lipase;
KW endothelial lipase associated disorder; cardiovascular disease; mouse;
KW antisense oligonucleotide; antisense technology; ss.
XX
XX Homo sapiens.
OS
XX

```

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FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004115653-A1.
XX
XX 17-JUN-2004.
XX
XX 12-DEC-2002; 2002US-00319915.
XX
XX 12-DEC-2002; 2002US-00319915.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-449390/42.
XX
XX New antisense oligonucleotides for modulating endothelial lipase
PT expression, useful for diagnosing, preventing or treating diseases
PT associated with aberrant endothelial lipase expression, e.g.
PT cardiovascular disease.
XX
XX Example 16; SEQ ID NO 130; 114pp; English.
PS
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding endothelial lipase. The compound
CC specifically hybridises with the nucleic acid molecule encoding
CC endothelial lipase (which comprises a sequence of 3927 bp fully defined
CC in the specification) and inhibits the expression of endothelial lipase.
CC Also described are: inhibiting the expression of endothelial lipase in
CC cells or tissues; screening for a modulator of endothelial lipase; a
CC diagnostic method for identifying a disease state; a kit or assay device
CC comprising the above compound; and treating an animal having a disease or
CC condition associated with endothelial lipase, comprising administering to
CC the animal a therapeutic or prophylactic amount of the compound so that
CC expression of endothelial lipase is inhibited. The antisense
CC oligonucleotide is useful for inhibiting the expression of endothelial
CC lipase in cells or tissues to prevent or treat diseases associated with
CC aberrant endothelial lipase expression, such as cardiovascular disease.
CC In addition, the compound is used for diagnostics, prophylaxis, or as
CC research reagents or kits. This sequence represents a mouse endothelial
CC lipase antisense oligonucleotide.
XX
XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 576 TGTGAGCCTATCTGAGATTG 595
DB |||||
1 TTTCACCATCTCTGAGATTG 20
RESULT 2094
ADP66995/C
ID ADP66995 standard; DNA; 20 BP.
XX
XX ADP66995;
AC
XX
XX 09-SEP-2004 (first entry)
DT

```

XX Mouse endothelial lipase antisense oligonucleotide seqid 251.
DE antisense therapy: endothelial lipase;
XX endothelial lipase associated disorder; cardiovascular disease; mouse;
KW antisense oligonucleotide; antisense technology; ss.
KW
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004115653-A1.
XX
XX 17-JUN-2004.
XX
PF 12-DEC-2002; 2002US-00319915.
XX
PR 12-DEC-2002; 2002US-00319915.
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-449390/42.
XX
XX New antisense oligonucleotides for modulating endothelial lipase
PT expression, useful for diagnosing, preventing or treating diseases
PT associated with aberrant endothelial lipase expression, e.g.
PT cardiovascular disease.
XX
PS Example 16; SEQ ID NO 251; 114pp; English.
XX
CC The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding endothelial lipase. The compound
CC specifically hybridizes with the nucleic acid molecule encoding
CC endothelial lipase (which comprises a sequence of 3927 bp fully defined
CC in the specification) and inhibits the expression of endothelial lipase.
CC Also described are: inhibiting the expression of endothelial lipase in
CC cells or tissues; screening for a modulator of endothelial lipase; a
CC diagnostic method for identifying a disease state; a kit or assay device
CC comprising the above compound; and treating an animal having a disease or
CC condition associated with endothelial lipase, comprising administering to
CC the animal a therapeutic or prophylactic amount of the compound so that
CC expression of endothelial lipase is inhibited. The antisense
CC oligonucleotide is useful for inhibiting the expression of endothelial
CC lipase in cells or tissues to prevent or treat diseases associated with
CC aberrant endothelial lipase expression, such as cardiovascular disease.
CC In addition, the compound is used for diagnostics, prophylaxis, or as
CC research reagents or kits. This sequence represents a mouse endothelial
CC lipase antisense oligonucleotide.
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 576 TGTACGCTATCTGAGATTG 595
Db 20 TTTCACCATCTCTGAGATTG 1

RESULT 2095
AAZ26102/c
ID AAZ26102 standard; DNA; 21 BP.
XX
XX AAZ26102;
AC
XX 30-NOV-1999 (first entry)
DT Human polymorphic region 291.
XX
DE
DE Human polymorphic region 291.
XX
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
XX Homo sapiens.
OS
XX WO9841648-A2.
PN
XX 24-SEP-1998.
PD
XX 19-MAR-1998; 98WO-US005419.
PF
XX 20-MAR-1997; 97US-0041057P.
PR
XX (VARI-) VARIAGENICS INC.
PA
XX Housman D, Ledley FD, Stanton VP;
PI
XX WPI; 1998-521232/44.
DR
XX
XX Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.
XX
PS Disclosure; Fig 7; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 1 A; 5 C; 10 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.6; DB 1; Length 21;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1659 CACCCCTCACAGGCGAGCCC 1678
Db 20 CACCACCTCACAGGCGAGCCC 1

RESULT 2096
AAF97537

```

ID  AAF97537 standard; DNA; 21 BP.
XX
AC  AAF97537;
XX
DT  06-JUN-2001 (first entry)
XX
DE  Human gene single nucleotide polymorphism #2298.
XX
KW  Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW  polymorphism; vascular disease; coronary artery disease; forensics;
KW  myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW  pulmonary embolism; paternity test; ds.
XX
OS  Homo sapiens.
XX
FH  Key Location/Qualifiers
FT  Variation replace(11,G)
FT  /*tag= a
FT  /standard_name= "single nucleotide polymorphism"
XX
XX  WO200118250-A2.
XX
XX  15-MAR-2001.
XX
XX  07-SEP-2000; 2000WO-US024503.
XX
XX  10-SEP-1999; 99US-0153357P.
XX  26-JUL-2000; 2000US-0220947P.
XX  16-AUG-2000; 2000US-0225724P.
XX
XX  (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX  (MILL-) MILLENNIUM PHARM INC.
XX
XX  Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX  WPI; 2001-226749/23.
XX
XX  Nucleic acids comprising single nucleotide polymorphisms, useful in
XX  applications such as forensics, paternity testing, medicine, genetic
XX  analysis and phenotype correlations to diseases such as diabetes and
XX  atherosclerosis.
XX
XX  Example; Page 204; 242pp; English.
XX
XX  The present invention provides a method of diagnosing a vascular disease
XX  in an individual, involving determining the sequence at various
XX  polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX  genes. The sequences at a number of polymorphic sites are also provided
XX  in the specification. In particular, the method can be used in the
XX  diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX  disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX  pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX  useful in forensics, paternity testing, genetic analysis and phenotype
XX  correlations to diseases. The present sequence is an example of one of
XX  the human gene SNPs shown in the specification
XX
SQ  Sequence 21 BP; 3 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.6; DB 1; Length 21;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy  1459 TTCCTCAGTCGCGGAGCG 1478
    |||||
Db  1 TTCCTCAGCGACGCGGAGG 20

RESULT 2097
AAQ24934/C
ID  AAQ24934 standard; DNA; 15 BP.
XX
AC  AAQ24934;
XX

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DT  25-MAR-2003 (revised)
DT  19-NOV-1992 (first entry)
XX
DE  Synthetic primer (261).
XX
KW  Single primer amplification; SPAR; ss.
XX
OS  Synthetic.
XX
XX  WO9207948-A1.
XX
XX  14-MAY-1992.
XX
XX  05-NOV-1991; 91WO-US008233.
XX
XX  06-NOV-1990; 90US-00610973.
XX  29-JUL-1991; 91US-00737919.
XX
XX  (LUBR ) LUBRIZOL CORP.
XX
XX  Cardineau GA, Filner P;
XX  WPI; 1992-183683/22.
XX
XX  Nucleic acid sequence single primer amplification - useful for genomic
XX  variation analysis and polymorphism detection for restriction fragment
XX  length data.
XX
XX  Claim 16; Page 39; 65pp; English.
XX
XX  The selected primer is used in practice of the single primer
XX  amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN
XX  field.)
XX
SQ  Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. NO. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy  230 GTGCTGCTGCTGCTGCG 244
    |||||
Db  15 GTGCTGCTGCTGCTG 1

RESULT 2098
AAT55034
ID  AAT55034 standard; RNA; 15 BP.
XX
AC  AAT55034;
XX
XX  25-MAR-2003 (revised)
DT  18-APR-1997 (first entry)
XX
XX  Human relA hammerhead ribozyme target sequence (nt. position 631).
XX
XX  Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX  gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX  intercellular adhesion molecule; rel A; tumour necrosis factor;
XX  TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX  translocation; chronic myelogenous leukaemia; CML; cancer;
XX  Philadelphia chromosome; inflammation; autoimmune disease;
XX  atherosclerosis; myocardial infarction; stroke; restenosis;
XX  transplant rejection; rheumatoid arthritis; psoriasis;
XX  myocardial ischaemia; Kawasaki disease; septic shock; HIV;
XX  human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX  ss.
XX
XX  Homo sapiens.
XX
XX  WO9523225-A2.
XX
XX  31-AUG-1995.
XX

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XX PF 23-FEB-1995; 95WO-IB000156.
XX AC 23-FEB-1994; 94US-00201109.
PR 23-FEB-1994; 94US-00218934.
PR 04-MAR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Stinchcomb DT, Chowira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich X, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX DR Ribozymes having modified bases and methods for producing them - for use
XX PT in inhibiting disease related genes.
XX PS Claim 2; Page 228; 407pp; English.
XX CC The present sequence represents a preferred target sequence for an
XX CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves reia mRNA at the
XX CC nucleotide base position indicated in the DE line. The reia gene product
XX CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
XX CC specifically in the induction of inflammatory responses. Regions of the
XX CC mRNA that do not form secondary folding structures and that contain
XX CC potential hammerhead and hairpin ribozyme cleavage sites were identified
XX CC by computer analysis. Ribozymes directed against these mRNA sequences
XX CC were designed and synthesised with modifications that improve their
XX CC nuclease resistance. The ribozymes are designed to cleave the target
XX CC sequences and thereby inhibit reia expression, making them potentially
XX CC useful for treating rheumatoid arthritis, restenosis and asthma as well
XX CC as for increasing tolerance to transplanted tissues. The potential
XX CC immunosuppressive properties of a ribozyme that cleaves reia mRNA means
XX CC that uses are limited to local delivery, acute indications or ex vivo
XX CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.5e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 539 CCATCTTTCAGCAGC 553
DB 1 CCAUCUUUGACAAUC 15
||||:|||||
DE DNA sequence of the specification.
XX Hybridisation probe; differentiation; pathogenic; vaccine strain;

RESULT 2099

XX PF 23-FEB-1995; 95WO-IB000156.
XX AC 23-FEB-1994; 94US-00201109.
PR 23-FEB-1994; 94US-00218934.
PR 04-MAR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Stinchcomb DT, Chowira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich X, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX DR Ribozymes having modified bases and methods for producing them - for use
XX PT in inhibiting disease related genes.
XX PS Claim 2; Page 228; 407pp; English.
XX CC The present sequence represents a preferred target sequence for an
XX CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves reia mRNA at the
XX CC nucleotide base position indicated in the DE line. The reia gene product
XX CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
XX CC specifically in the induction of inflammatory responses. Regions of the
XX CC mRNA that do not form secondary folding structures and that contain
XX CC potential hammerhead and hairpin ribozyme cleavage sites were identified
XX CC by computer analysis. Ribozymes directed against these mRNA sequences
XX CC were designed and synthesised with modifications that improve their
XX CC nuclease resistance. The ribozymes are designed to cleave the target
XX CC sequences and thereby inhibit reia expression, making them potentially
XX CC useful for treating rheumatoid arthritis, restenosis and asthma as well
XX CC as for increasing tolerance to transplanted tissues. The potential
XX CC immunosuppressive properties of a ribozyme that cleaves reia mRNA means
XX CC that uses are limited to local delivery, acute indications or ex vivo
XX CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.5e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 539 CCATCTTTCAGCAGC 553
DB 1 CCAUCUUUGACAAUC 15
||||:|||||
DE DNA sequence of the specification.
XX Hybridisation probe; differentiation; pathogenic; vaccine strain;

RESULT 2099

AAAX75669/c
ID AAX75669 standard; RNA; 15 BP.
XX AC AAX75669;
XX DT 28-JUL-1999 (first entry)
XX DE Human flt-1 and KDR hammerhead ribozyme target site #3.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX OS Homo sapiens.
XX PN WO9715662-A2.
XX PD 01-MAY-1997.
XX PF 25-OCT-1996; 96WO-US017480.
XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR) CHIRON CORP.
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX PT rheumatoid arthritis, etc., in a human patient.
XX PS Example 9; Page 191; 218pp; English.
XX CC The present invention describes nucleic acid molecules which modulate the
XX CC synthesis, expression and/or stability of a mRNA encoding 1 or more
XX CC receptors of vascular endothelial growth factor (VEGF). A patient
XX CC (preferably human) having a condition associated with the level of the
XX CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX CC treated by administering the nucleic acid molecule or the expression
XX CC vector to the patient. AAX75725 to AAX75752 represent specific examples
XX CC of nucleic acid molecules from the present invention
XX SQ Sequence 15 BP; 7 A; 1 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1501 ACTTCATATTGCA 1515
DB 15 ATTCCATATTGCA 1
|||||||
DE DNA sequence of the specification.
XX Hybridisation probe; differentiation; pathogenic; vaccine strain;

RESULT 2100
AAV42654/c
ID AAV42654 standard; DNA; 15 BP.
XX AC AAV42654;
XX DT 25-MAR-2003 (revised)
XX DT 16-OCT-1998 (first entry)
XX DE DNA sequence of the specification.
XX KW Hybridisation probe; differentiation; pathogenic; vaccine strain;

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KW cattle brucellosis; ss.
XX Synthetic.
XX RU2095418-C1.
XX 10-NOV-1997.
XX
XX PD 01-JUL-1994; 94RU-00024845.
XX
XX PF 01-JUL-1994; 94RU-00024845.
XX
XX PR 01-JUL-1994; 94RU-00024845.
XX
XX PA (KZVE-) KAZAN VETERINARY MED ACAD.
XX
XX PI Faizov T Kh, Idrisov GZ, Mullakaev OT;
XX
XX WPI; 1998-411609/35.
XX
XX PT Differentiating pathogenic and vaccine strains of cattle brucellosis -
XX using restriction digestion with Nco 1 and transfer of the DNA fragments
XX to filters in an electric field.
XX
XX PS Disclosure; Col 4; 4pp; Russian.
XX
XX CC The present sequence appears in the specification, which describes a
XX hybridisation probe used to differentiate between pathogenic and vaccine
XX strains of cattle brucellosis. The method comprises digestion of DNA from
XX the test strain with restriction enzyme Nco 1, transfer of the fragments
XX obtained to filters, subsequent fixing of these onto the filters,
XX hybridisation with a labelled sample, and examination of the results.
XX (Updated on 25-MAR-2003 to correct PI field.)
XX
XX SQ Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCG 244
DB 15 GTGGTGGTGGTGGTG 1

RESULT 2101
AAV42817/C
ID AAV42817 standard; DNA; 15 BP.
XX
XX AC AAV42817;
XX
XX DT 25-MAR-2003 (revised)
XX
XX DT 16-OCT-1998 (first entry)
XX
XX DE Probe used to identify pathogenic and vaccine strains of brucellosis.
XX
XX KW Hybridisation probe; differentiation; pathogenic; vaccine strain;
XX cattle brucellosis; ss.
XX
XX OS Synthetic.
XX
XX PN RU2095418-C1.
XX
XX PD 10-NOV-1997.
XX
XX PF 01-JUL-1994; 94RU-00024845.
XX
XX PR 01-JUL-1994; 94RU-00024845.
XX
XX PA (KZVE-) KAZAN VETERINARY MED ACAD.
XX
XX PI Faizov T Kh, Idrisov GZ, Mullakaev OT;
XX
XX WPI; 1998-411609/35.
XX

cattle brucellosis; ss.
XX Synthetic.
XX RU2095418-C1.
XX 10-NOV-1997.
XX
XX PD 01-JUL-1994; 94RU-00024845.
XX
XX PF 01-JUL-1994; 94RU-00024845.
XX
XX PR 01-JUL-1994; 94RU-00024845.
XX
XX PA (KZVE-) KAZAN VETERINARY MED ACAD.
XX
XX PI Faizov T Kh, Idrisov GZ, Mullakaev OT;
XX
XX WPI; 1998-411609/35.
XX

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCG 244
DB 15 GTGGTGGTGGTGGTG 1

RESULT 2102
AAAX31178/C
ID AAAX31178 standard; DNA; 15 BP.
XX
XX AC AAAX31178;
XX
XX DT 21-MAY-1999 (first entry)
XX
XX DE Tag sequence of a transcript increased in colorectal cancer.
XX
XX KW Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
XX diagnosis; prognosis; treatment; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9853319-A2.
XX
XX PD 26-NOV-1998.
XX
XX PF 20-MAY-1998; 98WO-US010277.
XX
XX PR 21-MAY-1997; 97US-0047352P.
XX
XX PA (UYJO ) UNIV JOHNS HOPKINS.
XX
XX PI Vogelstein B, Kinzler KW;
XX
XX DR WPI; 1999-070161/06.
XX
XX PT Use of isolated gene transcripts - useful for developing products for the
XX diagnosis, prognosis and treatment of cancers, particularly colon and
XX pancreatic cancer.
XX
XX PS Claim 2; Page 34; 120pp; English.
XX
XX CC AAX30947-31815 represent tag sequences of transcripts that are
XX differentially expressed in colorectal cancer, in pancreatic cancer, or
XX in both. The tag sequences can be used to identify genes by matching the
XX tag to a gen data base member, or by using the tag sequences as probes to
XX isolate unidentified genes from cDNA libraries. The tag sequences can
XX also be used in a method for diagnosing colon or pancreatic cancer in a
XX sample suspected of being neoplastic. The method comprises comparing the
XX level of at least one transcript in a first sample of a tissue to a
XX second sample, where the first sample is a colonic tissue suspected of
XX being neoplastic and the second sample is a normal human colonic tissue.
XX The transcript is identified by a tag selected from AAX30947-31815. The
XX methods of the invention can be used in the diagnosis, prognosis and
XX treatment of cancer

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XX SQ Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 926 TCCAGCTGCTCCGTG 940
DB 15 TCCAGCTGCTCCATG 1
RESULT 2103
AAA92356
ID AAA92356 standard; DNA; 15 BP.
XX
AC AAA92356;
XX
DT 11-JAN-2001 (first entry)
XX
DE Original DNA template oligonucleotide sequence.
XX
KW Dideoxyribonucleic acid; dDNA; research; medical application;
KW data communication; DNA sequencing; ss.
XX
OS Synthetic.
XX
PN CA2256128-Al.
XX
PD 29-JUN-2000.
XX
PF 29-DEC-1998; 98CA-02256128.
XX
PR 29-DEC-1998; 98CA-02256128.
XX
PA (DAVI/) DAVIES S W.
XX
PI Davies SW;
XX
DR WPI; 2000-587794/56.
XX
PT Extracting sequences of bases from dideoxyribonucleic acid templates for
PT research and medical applications, involves creating a new set of
PT molecules which introduce error correcting code, from the template.
XX
PS Disclosure; Page 4; 9pp; English.
XX
CC The present invention describes a method (I) for extracting a sequence of
CC bases from a dideoxyribonucleic acid (dDNA) template. The method
CC comprises forming a set of products (P) selected to implement a code with
CC desirable error correcting characteristics from the template through
CC chemical reactions, obtaining a set of signals (S) from (P) by DNA
CC sequencing and using the code to recover the base sequence from (S), to
CC obtain accurate sequence estimate. (I) is useful for a research and
CC medical applications. (I) minimises error rates in sequencing or testing
CC nucleic acids. The present sequence represents an original DNA template
CC which is used in the exemplification of the present invention
XX
SQ Sequence 15 BP; 5 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1326 CAAGTACCGAGCCGA 1340
DB 1 CAAGTACCGAGCTGA 15
RESULT 2104
AAA29402/c
ID AAA29402 standard; DNA; 15 BP.
XX
XX SQ Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 374 AGGCTTCAGCCACGT 388
DB 15 AGGCTTCAGCCACGT 1
RESULT 2105
AAF50411/c
ID AAF50411 standard; DNA; 15 BP.
XX
AC AAF50411;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1371.
XX
```

```
AC AAA29402;
XX
DT 07-AUG-2000 (first entry)
XX
DE Acid/base orthological deprotection scheme 15-mer oligonucleotide #2.
XX
KW Acid/base orthological deprotection scheme; DNA synthesis;
KW codon randomised nucleic acid; randomised cassette mutagenesis;
KW phage display; ribosome display; protein-nucleic acid fusion;
KW protein expression; in vitro translation system; ss.
XX
OS Synthetic.
XX
PN WO200018778-Al.
XX
PD 06-APR-2000.
XX
PF 28-SEP-1999; 99WO-US022436.
XX
PR 29-SEP-1998; 98US-0102299P.
XX
PA (PHYL-) PHYLLOS INC.
XX
PI Lohse P, Kuimelis RG;
XX
DR WPI; 2000-293102/25.
XX
PT Synthesis of selected codon randomized nucleic acids useful for
PT generation of DNA or RNA sequences for pharmaceutical research.
XX
PS Example 8; Page 29; 61pp; English.
XX
CC A method (I) has been developed for generating, in the same reaction
CC vessel, a selected set of codons (II). The method comprises providing two
CC (optionally three) sets of mononucleosides, mononucleotides,
CC dinucleotides or mixtures of these and optionally repeatedly adding a
CC third set, where (II) includes at least one codon having A or G at the
CC third codon position and fewer than 3% of the codons correspond to a stop
CC codon. Also described is a method (III) for generating an oligonucleotide
CC from (II), comprising the method (I), followed by repeating the method
CC until an oligonucleotide of the desired length is achieved. (I) and (II)
CC are useful for chemically synthesising DNA or RNA. The DNA sequences
CC generated provide a wide variety of protein products useful in
CC pharmaceutical research. In particular the methods are useful in
CC techniques of randomised cassette mutagenesis of proteins, phage display
CC techniques. Codon-randomised DNA can also be used in cellular cultures
CC (in vivo) for protein expression, or for in vitro applications using,
CC e.g. T7 RNA polymerase, and in vitro translation systems. The present
CC sequence represents an oligonucleotide which is used in the
CC exemplification of the present invention
XX
SQ Sequence 15 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 374 AGGCTTCAGCCACGT 388
DB 15 AGGCTTCAGCCACGT 1
RESULT 2105
AAF50411/c
ID AAF50411 standard; DNA; 15 BP.
XX
AC AAF50411;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1371.
XX
```

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 DR

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 PT

PS Example 8; Page 69; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX

SQ Sequence 15 BP; 7 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1684 TACATCTTCCCTGCT 1698
 Db 15 TACATTTTCCCTGCT 1

RESULT 2106
 AAF46589/C
 ID AAF46589 standard; DNA; 15 BP.
 XX
 AC AAF46589;
 XX

DT 30-MAR-2001 (first entry)
 XX
 DE IGFBP3 oligonucleotide #9.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 DR

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 PT

PS Example 7; Page 44; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX

SQ Sequence 15 BP; 1 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1634 GCAGGCGAGCGCTGG 1648
 Db 15 GCAGGAAGCGCTGG 1

RESULT 2107
 AAF50410/C
 ID AAF50410 standard; DNA; 15 BP.
 XX
 AC AAF50410;
 XX

DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #1370.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.


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XX OS Homo sapiens.
XX EN WO200078341-A1.
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wright CJ, Werther GA, Edmondson SR;
XX DR WPI; 2001-041421/05.
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX PT UV (ultra-violet) treatment (optional) and an antisen nucleic acid that
XX PT inhibits or reduces growth factor mediated cell proliferation and/or
XX PT inflammation.
XX PS Example 8; Page 69; 201pp; English.
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX SQ Sequence 15 BP; 7 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1685 ACATCTTCCTGCTT 1699
DB ||||| ||||| |||||
15 ACATTTTCCTGCTT 1

RESULT 2108
AAAF50702/c
ID AAF50702 standard; DNA; 15 BP.
XX AC
XX AC AAF50702;
XX DT
XX DT 30-MAR-2001 (first entry)
XX DE
XX DE IGF-I oligonucleotide #1662.
XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX KW hyperneovascular condition; hyperplasia; kidney disease;
XX KW neovascular condition of the retina; ss.
XX OS Homo sapiens.
XX EN WO200078341-A1.

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XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wright CJ, Werther GA, Edmondson SR;
XX DR WPI; 2001-041421/05.
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX PT inhibits or reduces growth factor mediated cell proliferation and/or
XX PT inflammation.
XX PS Example 8; Page 71; 201pp; English.
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX SQ Sequence 15 BP; 2 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1283 CAGGCATCCTGTCCTCA 1297
DB ||||| ||||| |||||
15 CAGGCATCCTGTCCTCA 1

RESULT 2109
ABZ34171
ID ABZ34171 standard; DNA; 15 BP.
XX AC
XX AC ABZ34171;
XX DT
XX DT 31-JAN-2003 (first entry)
XX DE
XX DE HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:413.
XX KW Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme;
XX KW detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
XX KW probe; ss.
XX OS Human immunodeficiency virus 1.
XX OS Synthetic.
XX PN WO200255741-A2.
XX PD 18-JUL-2002.
XX PF 09-JAN-2002; 2002WO-EP000153.
XX PR 11-JAN-2001; 2001EP-00870005.
XX PR 20-APR-2001; 2001EP-00870085.
XX PR 24-APR-2001; 2001US-0286102P.

```

XX (INNO-) INNOGENETICS NV.
 XX De Smet K, Stuyver L;
 PI WPI; 2002-590680/63.
 XX
 DR Detecting mutations associated with anti-HIV drug resistance comprises
 XX detecting at least one of the mutations in the HIV reverse transcriptase
 PT gene by using probes optimized to function together in a reverse-
 PT hybridization assay.
 XX
 XX Claim 2; Page 27; 117pp; English.
 PS
 XX The present invention describes a method for detecting mutations
 CC associated with anti-HIV drug resistance in a patient by detecting at
 CC least one of the mutations K103N/R, V106A/I/L, Y181C/I, M184V/I, Y188L,
 CC G190A/S/R, T215Y/F/D/S/A and/or Q151M/L in the reverse transcriptase (RT)
 CC of HIV strains in a biological sample using a specific set of probes
 CC optimised to function together in a reverse-hybridisation assay. The
 CC method and the nucleic acid sequences used in the method are useful for
 CC determining viral mutations and/or polymorphisms in the HIV RT gene
 CC associated with resistance. The probes are useful for the genetic
 CC detection, preferably in vitro detection of the mutations K103N/R,
 CC V106A/I/L, Y181C/I, Q151M/L, M184V/I, Y188L, G190A/S/R and/or
 CC T215Y/F/D/S/A in the RT of HIV strains in a biological sample, where the
 CC mutation is associated with anti-HIV drug resistance. The method provides
 CC a rapid, reliable and precise assay or determination and monitoring of
 CC antiviral drug resistance or mutations associated with drug resistance of
 CC viruses containing RT genes. AB233759 to AB234642 represent HIV RT
 CC sequences and probes which are used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 15 BP; 4 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 867 GCAGTACCTGGATCA 881
 DB 1 GCAGTACCTGGATCA 15
 RESULT 2110
 ABK32132/c
 ID ABK32132 standard; DNA; 15 BP.
 XX AC
 XX ABK32132;
 XX
 DT 23-APR-2002 (first entry)
 XX
 DE Human colon cancer SAGE tag #233.
 XX
 KW Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
 KW serial analysis of gene expression; diagnostic; prognostic; probe;
 KW cancer marker; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6333152-B1.
 XX
 PD 25-DEC-2001.
 XX
 XX 20-MAY-1998; 98US-00081646.
 XX
 XX 20-MAY-1998; 98US-00081646.
 XX
 PA (YUJO) UNIV JOHNS HOPKINS.
 XX
 XX Vogelstein B, Kinzler KW, Zhang L, Zhou W;
 PI WPI; 2002-153821/20.
 XX
 DR

XX New human nucleic acid containing specific SAGE tags, useful as
 PT diagnostic markers for cancer, also derived probes.
 XX
 XX Disclosure; Col 29; 161pp; English.
 XX
 CC The invention relates to an isolated, purified human nucleic acid (I)
 CC that has the same sequence as a mRNA found in humans and is a SAGE
 CC (serial analysis of gene expression) tag comprising a single stranded
 CC probe containing at least 10 consecutive nucleotides. SAGE tags, are
 CC diagnostic and prognostic markers of cancer, especially of the colon and
 CC pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
 CC SAGE tags of the invention
 XX
 XX Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 926 TCCAGCTGCTCCGTG 940
 DB 15 TCCAGCTGCTCCATG 1
 RESULT 2111
 AD081151/c
 ID AD081151 standard; DNA; 15 BP.
 XX AC
 XX AD081151;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Prion protein polymorphic microsatellite marker consensus sequence #29.
 XX
 KW gene typing; polymorphic microsatellite loci; PMU;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
 KW microsatellite; ds.
 XX
 OS Synthetic.
 XX
 PN DE10236711-A1.
 XX
 PD 26-FEB-2004.
 XX
 XX 09-AUG-2002; 2002DE-01036711.
 XX
 XX 09-AUG-2002; 2002DE-01036711.
 XX
 XX (UYHO-) UNIV HOHENHEIM.
 XX
 XX Geldermann H, Preuss S, Han Y;
 XX WPI; 2004-215730/21.
 XX
 PT Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.
 XX
 XX Claim 9; Page 50; 64pp; German.
 XX
 CC The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to

CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a prion protein polymorphic microsatellite marker
 CC consensus sequence.

XX Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 9.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCG 244

DB 15 GTGGTGGTGGTGGTG 1

RESULT 2112

AAT32677
 ID AAT32677 standard; DNA; 16 BP.

XX AAT32677;

DT 11-FEB-1997 (first entry)

DE Ineffective anti-HIV Rev response element probe 7819.

XX Rev response element; HIV isolate sf2; hybridize probe pool;
 XX hybridize mapping; ss.

OS Synthetic.

FH Key Location/Qualifiers
 FT modified_base 1..16
 FT /*tag= a
 FT /note= "Linked via phosphorothioate linkages"

XX WO9617955-A2.

PD 13-JUN-1996.

PF 05-DEC-1995; 95WO-US015779.

PR 05-DEC-1994; 94US-00349316.

XX (CHTR) CHIRON CORP.

PA Collins ML;

DR WPI; 1996-287198/29.

XX Detecting target binding oligo-nucleotide(s) - using oligo-nucleotide
 PT probes with a nucleotide sequence which binds within a known sequence of
 PT a target nucleic acid.

PS Example 5; Page 27; 43pp; English.

XX The sequences given in AAT32673-76 represent effective, and those in
 CC AAT32677-83 ineffective, anti-HIV Rev response element probes isolated
 CC from a hybridize probe pool. Hybridize mapping describes a method of
 CC determining superior sites for binding oligonucleotides to a target
 CC sequence, to identify improved discontinuous probes with high binding
 CC constants. The method comprises obtaining a series of oligonucleotides
 CC which are complementary to a known target sequence and which overlap each
 CC other by 1-4 nucleotides. Each of these sequences is contacted with the
 CC target sequence to permit specific hybridisation, and detecting the
 CC presence or absence of specific hybridisation to determine
 CC oligonucleotides which bind within the known target sequence. This
 CC sequence was isolated using the probe sequences given in AAT32670-72. The
 CC number of this probe corresponds to the 5' position on the HIV sf2 target
 CC to which the 3' end of the probe binds

XX Sequence 16 BP; 4 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 16;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 156 GTCATGACACTCCG 170

DB 1 GTCATGACACTCCG 15

RESULT 2113

AAT11976/c
 ID AAT11976 standard; DNA; 17 BP.

XX AAT11976;

DT 25-MAR-2003 (revised)

DT 13-MAR-1996 (first entry)

XX CMV antisense oligonucleotide (ISIS 5480).

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.

OS Synthetic.

FH Key Location/Qualifiers
 FT modified_base 1..17
 FT /*tag= a
 FT /note= "phosphorothioate backbone"

XX US5442049-A.

PD 15-AUG-1995.

PF 25-JAN-1993; 93US-00009263.

PR 19-NOV-1992; 92US-00927506.

XX (ISIS-) ISIS PHARM INC.

PI Baker B, Draper K, Anderson K;

XX WPI; 1995-292538/38.

XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
 PT treatment of CMV diseases.

PS Example 10; Col 17; 66pp; English.

XX AAT11971-84 are antisense oligonucleotides (ONS) against human
 CC cytomegalovirus (CMV) that displayed activities of at least 50 % of
 CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
 CC mismatches could be tolerated without loss of antiviral activity.
 CC Antisense ONS targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
 CC polymerase proteins have been shown to be effective in therapy,
 CC prophylaxis and diagnosis of CMV infection. The ONS may be modified to
 CC reduce nuclease resistance and to increase their efficacy. Modifications
 CC include phosphorothioate backbones, alkyl and halogen-substituted sugar
 CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
 CC field.)

XX Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 135 GAAGAAGATCAACG 149

DE Human KDR VEGF receptor hammerhead ribozyme substrate #483.
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9715662-A2.
 XX
 PD 01-MAY-1997.
 XX
 PF 25-OCT-1996; 96WO-US017480.
 XX
 PR 26-OCT-1995; 95US-0005974P.
 XX
 PR 11-JAN-1996; 96US-00584040.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 PS Claim 4; Page 111; 218pp; English.
 XX
 CC The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX
 SQ Sequence 17 BP; 1 A; 3 C; 6 G; 0 T; 7 U; 0 Other;
 XX
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 60.0%; Pred. No. 1.1e+03;
 Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
 QY 1032 TGACTTTGGCCTGGC 1046
 Db :|||||:|||||
 3 UGACUUGGCUUGGC 17
 RESULT 2117
 AAV97521
 ID AAV97521 standard; RNA; 17 BP.
 AC AAV97521;
 XX
 XX 17-MAR-1999 (first entry)
 DT
 XX Human EGF-R target sequence nucleotide position 2624.
 DE
 XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
 KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
 KW cancer; genetic drift; detection; mutation; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9833893-A2.
 XX
 PD 06-AUG-1998.

XX 14-JAN-1998; 98WO-US000730.
 XX
 PR 31-JAN-1997; 97US-0036476P.
 PR 04-DEC-1997; 97US-00985162.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (UYAS-) UNIV ASTON.
 XX
 PI Akhtar S, Fell P, Mcswiggen JA;
 XX WPI; 1998-437449/37.
 DR
 XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal
 PT growth factor receptor, useful for inhibiting cell proliferation and for
 PT treating cancers.
 XX
 PS Claim 5; Page 74; 109pp; English.
 XX
 CC The present invention describes enzymatic nucleic acid molecules (NAMS)
 CC which specifically cleave RNA derived from an epidermal growth factor
 CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
 CC represent specifically claimed target sequence from human EGF-R. AAV98044
 CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
 CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
 CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
 CC expression levels e.g. to inhibit cell proliferation in the prevention or
 CC treatment of cancers. The NAMS can also be used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of EGF-R RNA in a cell
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 2 G; 0 T; 4 U; 0 Other;
 XX
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 989 CCCAGAACCTGCTCA 1003
 Db :|||||:|||||
 3 CCCAGUACCGCUCA 17
 RESULT 2118
 AAV69694
 ID AAV69694 standard; DNA; 17 BP.
 AC AAV69694;
 XX
 XX 05-FEB-1999 (first entry)
 DT
 XX Human GDNF gene exon 1 specific nested probe exon 1B.
 DE
 XX GDNF; glial cell line-derived neurotrophic factor; promoter; seizure;
 KW transcription; environmental stimulus; modulator; neural degeneration;
 KW Parkinson's disease; Lou Gehrig's disease; developmental defect; tumour;
 KW gene therapy; neural degeneration; immunodeficiency; haemophilia; cancer;
 KW human; probe; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9846737-A2.
 XX
 PD 22-OCT-1998.
 XX
 PF 15-APR-1998; 98WO-US007730.
 XX
 PR 15-APR-1997; 97US-00842675.
 XX
 PA (UYNE-) UNIV NEW JERSEY.
 XX
 PI Black IA, Woodbury D, Schaar DG, Ramakrishnan L;
 XX

DR WPI; 1998-594570/50.

XX New isolated glial cell line-derived neurotrophic factor promoter - used

PT to develop products for treating e.g. neuronal degeneration,

PT immunodeficiency, haemophilia or proliferative disorders such as cancers.

XX

PS Example 1; Page 43; 69pp; English.

XX

CC Sequences AAV69693 and AAV69694 represent nested oligonucleotide probes

CC corresponding to the exon 1 of the human glial cell line-derived

CC neurotrophic factor (GDNF) gene. These were used to identify the

CC initiation of transcription of hGDNF gene. The invention relates to the

CC use of the human GDNF promoter which contains a proximal section which

CC ensures consistent low level GDNF expression in multiple cell types, and

CC a distal section designed to alter transcription during development and

CC in response to environmental stimuli. The GDNF promoter can be used for

CC expressing GDNF in a cell, for identifying modulators and binding

CC partners of a GDNF promoter and modulators of GDNF expression. The

CC products can be used for diagnosis and treatment of disorders involving

CC GDNF such as neural degeneration, e.g. seizures, Parkinson's disease, Lou

CC Gehrig's disease, and various developmental defects resultant from the

CC decreased levels of GDNF during the prenatal and neonatal stage. The GDNF

CC promoter is also used for gene therapy and for expressing heterologous

CC genes for treating e.g. severe combined immunodeficiency, haemophilia or

CC proliferative disorders such as tumours and cancers

XX

SQ Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1422 TCGATCTCCGACA 1436

DB 1 TCGGCTCTCCGACA 15

RESULT 2119

AAAX17893/C

ID AAAX17893 standard; DNA; 17 BP.

XX

AC AAAX17893;

XX

DT 11-MAY-1999 (first entry)

XX

DE Anti-CMV oligonucleotide #5480.

XX

XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;

KW cytomegalovirus; inhibition; replication; sugar modification;

KW phosphorothioate; infection; retinitis; ss.

XX

OS Synthetic.

OS Human herpesvirus 5.

XX

PN WO9845314-A1.

XX

PD 15-OCT-1998.

XX

PF 07-APR-1998; 98WO-US006895.

XX

PR 09-APR-1997; 97US-00838715.

XX

XX (ISIS-) ISIS PHARM INC.

PA Draper KG, Kisner DL, Anderson KP, Chapman S;

XX

XX WPI; 1998-568330/48.

DR

XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -

PT particularly including 2-methoxyethoxy sugar modifications, especially

PT for treating viral retinitis, with long-lasting retention in the retina.

XX

PS Claim 7; Page 30; 99pp; English.

XX Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic

CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA

CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV

CC replication. Optionally the oligonucleotides include at least one 2'-(2-

CC methoxyethoxy) sugar modification or phosphorothioate internucleotide

CC linkages. The oligonucleotides are used to inhibit CMV infections (by in

CC vivo or in vitro contact with cells, tissues or body fluids), especially

CC to treat or prevent CMV infections, particularly retinitis

XX

SQ Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 135 GAAGAAGATCAACG 149

DB 16 GAAGAAGAGCAACG 2

RESULT 2120

AAAX1066/C

ID AAAX1066 standard; RNA; 17 BP.

XX

AC AAAX1066;

XX

DT 19-JUN-2000 (first entry)

XX

DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:4292.

XX

KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberculous scleritis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX

OS Homo sapiens.

XX

PN WO9950403-A2.

XX

PD 07-OCT-1999.

XX

PF 24-MAR-1999; 99WO-US006507.

XX

PR 27-MAR-1998; 98US-0079678P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA Pavco PA, Roberts E, Jarvis T, Coeshott C, Meswigen JA;

PI WPI; 1999-591315/50.

XX

DR Novel ribozymes for modulating the synthesis, expression and/or stability

PT of an mRNA encoding an angiogenic factors.

XX

PS Claim 55; Page 185; 305pp; English.

XX

CC The present invention describes enzymatic nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAAX16775 to

CC AAAX17167 and AAAX17561 to AAAX17622 represent ribozyme sequences for ARNT,

CC and AAAX17168 to AAAX17560 and AAAX17623 to AAAX17684 represent their

CC corresponding target sequences; AAAX17685 to AAAX18385 and AAAX19087 to

CC AAAX19154 represent ribozyme sequences for Tie-2, and AAAX18386 to AAAX19086

CC and AAAX19155 to AAAX19222 represent their corresponding target sequences;

CC AAAX19223 to AAAX20361 and AAAX21501 to AAAX21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AAAX20362 to AAAX21500 and

CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA23422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 CC especially used to treat cancer, diabetic retinopathy, age related
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3
 XX
 SQ Sequence 17 BP; 2 A; 0 C; 7 G; 0 T; 8 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1314 ATACAACTACCCCAA 1328
 Db 16 ACACAACTACCCCAA 2
 RESULT 2121
 AAA23257/c
 ID AAA23257 standard; RNA; 17 BP.
 XX
 AC AAA23257;
 XX
 DT 19-JUN-2000 (first entry)
 XX
 DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6483.
 XX
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO9950403-A2.
 XX
 PD 07-OCT-1999.
 XX
 PF 24-MAR-1999; 99WO-US006507.
 XX
 PR 27-MAR-1998; 98US-0079678P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 XX
 DR WPI; 1999-591315/50.
 XX
 PT Novel ribozymes for modulating the synthesis, expression and/or stability
 PT of an mRNA encoding an angiogenic factors.
 XX
 PS Claim 54; Page 271; 305pp; English.
 XX
 CC The present invention describes enzymatic nucleic acid molecules with RNA
 CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their

CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA23422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 CC especially used to treat cancer, diabetic retinopathy, age related
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3
 XX
 SQ Sequence 17 BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 808 ATTATCCACACGGAG 822
 Db 16 ATTATCCAAACGGAG 2
 RESULT 2122
 AAA20471
 ID AAA20471 standard; RNA; 17 BP.
 XX
 AC AAA20471;
 XX
 DT 19-JUN-2000 (first entry)
 XX
 DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3697.
 XX
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO9950403-A2.
 XX
 PD 07-OCT-1999.
 XX
 PF 24-MAR-1999; 99WO-US006507.
 XX
 PR 27-MAR-1998; 98US-0079678P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 XX
 DR WPI; 1999-591315/50.
 XX
 PT Novel ribozymes for modulating the synthesis, expression and/or stability
 PT of an mRNA encoding an angiogenic factors.
 XX
 PS Claim 55; Page 147; 305pp; English.
 XX
 CC The present invention describes enzymatic nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA23422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 CC especially used to treat cancer, diabetic retinopathy, age related
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3
 CC
 SQ Sequence 17 BP; 2 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 53.3%; Pred. No. 1.1e+03;
 Matches 8; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 918 GTTCTGTTCCAGCT 932
 ||:|:|:|:|:
 Db 1 GUUCCGUUCCUGCU 15

RESULT 2123
 AAA24802
 ID AAA24802 standard; DNA; 17 BP.

XX AC AAA24802;
 XX
 DT 19-JUL-2000 (first entry)
 XX
 DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1300.
 XX
 KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.

XX Homo sapiens.
 XX OS
 XX WO9954459-A2.
 XX
 XX 28-OCT-1999.
 PD
 XX
 XX 19-APR-1999; 99WO-US008547.
 XX
 XX 20-APR-1998; 98US-0082404P.
 PR
 PR 23-JUN-1998; 98US-00103636.
 XX

XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
 PI Matulic-Adamic J;
 XX
 XX WPI; 2000-013248/01.
 DR
 XX
 XX New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.
 PT

PS Claim 77; Page 58; 148pp; English.

XX The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodithioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX

SQ Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1315 TACAACACTACCCCAAG 1329
 |||||
 Db 2 TACAACACTACCCCGAG 16

RESULT 2124
 AAF06373
 ID AAF06373 standard; DNA; 17 BP.

XX AC AAF06373;
 XX
 DT 16-FEB-2001 (first entry)
 XX
 DE Hammerhead ribozyme substrate #3170.
 XX
 DE Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.

XX Homo sapiens.
 OS
 XX WO2000061729-A2.
 PN
 XX
 XX 19-OCT-2000.
 PD
 XX
 XX 11-APR-2000; 2000WO-US009721.
 PF
 XX
 XX 12-APR-1999; 99US-0129390P.
 PR
 XX
 XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Zwick M, Pavco P, Mcswiggen J;
 PI
 XX WPI; 2000-647423/62.
 DR

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 PT

PS Claim 42; Page 128; 164pp; English.

XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TP-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC

CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 73.3%; Pred. No. 1.le+03;
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 686 ACAACCTGTGGCAC 700
 ||| ||:|||||
 Db 2 ACAUCCUUGGCAC 16
 RESULT 2125
 ABK03332/C
 ID ABK03332 standard; RNA; 17 BP.
 XX
 AC ABK03332;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Human CD20 Inozyme #283.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGEN J.
 PA (CHOW/) CHOWIRRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowirra BM;
 XX
 DR WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 PS Claim 30; Page 150; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targetting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an inozyme of the invention
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.le+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 395 ATCAGGTGCAGTCTC 409
 || |||||
 Db 15 ATCAGGTGCAGTCTC 1
 RESULT 2126
 ABK03331/C
 ID ABK03331 standard; RNA; 17 BP.
 XX
 AC ABK03331;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Human CD20 Inozyme #282.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGEN J.
 PA (CHOW/) CHOWIRRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowirra BM;
 XX
 DR WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 PS Claim 30; Page 150; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule

```
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
PI Blatt L, Mcswiggen J, Chowrira BM;
XX WPI; 2001-607195/69.
DR
XX
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
XX Claim 30; Page 150; 200pp; English.
XX
XX The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a NYN motif) pr
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif)
CC an amberyze (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a Ygr motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg2+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 396 TCAGGTGCAGTCTCC 410
| | | | | | | | | |
Db 17 TCAGGTGCAGTCTCC 3
RESULT 2127
AAD03853/C
ID AAD03853 standard; DNA; 17 BP.
XX
XX AAD03853;
AC
XX
XX 02-JUL-2001 (first entry)
DT
XX
XX Human cell cycle checkpoint protein, hchk1 DNA amplifying PCR primer #2.
DE
XX
XX Human; cell cycle checkpoint; chk1; tumour; malignancy;
KW cell growth inhibitor; development deficiency; PCR primer; DNA damage;
KW kinase; ss.
```

```
XX Homo sapiens.
OS
XX US6218109-B1.
PN
XX 17-APR-2001.
PD
XX
XX 05-SEP-1997; 97US-00924183.
PF
XX
XX 05-SEP-1997; 97US-00924183.
PR
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
PA
XX Elledge SJ, Sanchez Y;
PI
XX WPI; 2001-289827/30.
DR
XX
XX New Chk1 proteins and gene sequences encoding the proteins useful as
PT probes for a portion of the chromosome associated with tumors and other
PT malignancies, growth and/or development deficiencies.
PT
XX Claim 17; Col 24; 37pp; English.
PS
XX The present sequence is a degenerate PCR primer used for amplifying the
CC human cell cycle checkpoint protein, hchk1 DNA. The cell cycle
CC checkpoints are regulatory pathways that control the order and timing of
CC cell cycle transitions, and ensure that critical events such as DNA
CC replication and chromosome segregation are completed with high fidelity.
CC The chk1 protein controls cell cycle in response to DNA damage. It
CC functions as kinase and phosphorylates the key regulators of Cdk tyrosine
CC phosphorylation. The checkpoint gene sequences are used as probes for a
CC portion of the chromosome associated with tumours and other malignancies,
CC as well as growth and/or development deficiencies. The chk1 proteins are
CC useful for generating specific antibodies and for inhibiting growth of
CC cells
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1033 GACITTTGGCTGGCC 1047
| | | | | | | | | |
Db 17 GACITTTGGCTGGCC 3
RESULT 2128
AAS95074/C
ID AAS95074 standard; DNA; 17 BP.
XX
XX AAS95074;
AC
XX
XX 13-FEB-2002 (first entry)
DT
XX
XX Human otoferlin exon PCR primer #39.
DE
XX
XX Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;
KW autosomal nonsyndromic prelingual deafness; DFNB9; ss.
XX
XX Homo sapiens.
OS
XX WO200170972-A2.
PN
XX
XX 27-SEP-2001.
PD
XX
XX 23-MAR-2001; 2001WO-IB000578.
PF
XX
XX 24-MAR-2000; 2000US-0191738P.
PR
XX (INSP ) INST PASTEUR.
PA (CNRS ) CNRS CENT NAT RECH SCI.
XX
```

PI Yasunaga S, Grati M, Cohen-Salmon M, El Amraoui A, Petit C;
PI Weil D;
XX WPI; 2001-611495/70.
XX Novel human gene Otoferlin, underlying an autosomal recessive
PT nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the
PT gene, implicated in deafness.
XX Claim 25; Page 17; 99pp; English.
XX The invention relates to a purified polynucleotide (I) encoding a protein
CC sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long
CC human otoferlin isoform in brain. (I) was identified as underlying an
CC autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for
CC detecting deafness disease in humans and for characterising the functions
CC of proteins and genes encoding them in auditory function. AAS95022-
CC AAS9248 represent human and mouse otoferlin coding sequences, PCR
CC primers and related sequences of the invention
XX
SQ Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 495 CCGCTGCTGCTGAGGG 509
Db 15 CAGGCTGCTGAGGG 1

RESULT 2129
ABN08906/C
ID ABN08906 standard; DNA; 17 BP.
XX
AC ABN08906;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8898.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX

DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
PS Disclosure; SEQ ID NO 8898; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 2 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 165 ACTCGAGGTGGCGG 179
Db 15 ACTCGAGGTGGCGG 1

RESULT 2130
ABN00075/C
ID ABN00075 standard; DNA; 17 BP.
XX
AC ABN00075;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:67.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 30-JAN-2001; 2001WO-US000671.
PR 30-JAN-2001; 2001WO-US000672.
PR 30-JAN-2001; 2001WO-US000673.
PR 30-JAN-2001; 2001WO-US000674.
PR 30-JAN-2001; 2001WO-US000675.
PR 30-JAN-2001; 2001WO-US000676.
PR 30-JAN-2001; 2001WO-US000677.
PR 30-JAN-2001; 2001WO-US000678.
PR 30-JAN-2001; 2001WO-US000679.
PR 30-JAN-2001; 2001WO-US000680.
PR 30-JAN-2001; 2001WO-US000681.
PR 30-JAN-2001; 2001WO-US000682.
PR 30-JAN-2001; 2001WO-US000683.
PR 30-JAN-2001; 2001WO-US000684.
PR 30-JAN-2001; 2001WO-US000685.
PR 30-JAN-2001; 2001WO-US000686.
PR 30-JAN-2001; 2001WO-US000687.
PR 30-JAN-2001; 2001WO-US000688.
PR 30-JAN-2001; 2001WO-US000689.
PR 30-JAN-2001; 2001WO-US000690.
PR 30-JAN-2001; 2001WO-US000691.
PR 30-JAN-2001; 2001WO-US000692.
PR 30-JAN-2001; 2001WO-US000693.
PR 30-JAN-2001; 2001WO-US000694.
PR 30-JAN-2001; 2001WO-US000695.
PR 30-JAN-2001; 2001WO-US000696.
PR 30-JAN-2001; 2001WO-US000697.
PR 30-JAN-2001; 2001WO-US000698.
PR 30-JAN-2001; 2001WO-US000699.
PR 30-JAN-2001; 2001WO-US000700.
PR 30-JAN-2001; 2001WO-US000701.
PR 30-JAN-2001; 2001WO-US000702.
PR 30-JAN-2001; 2001WO-US000703.
PR 30-JAN-2001; 2001WO-US000704.
PR 30-JAN-2001; 2001WO-US000705.
PR 30-JAN-2001; 2001WO-US000706.
PR 30-JAN-2001; 2001WO-US000707.
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PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 67; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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XX AC ABN00074;
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XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:66.
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XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
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PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
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PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
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XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 66; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
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XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 2 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1181.ATGAGATGGCCACAG 1195
DB 17 ATGAGATGGACACAG 3
RESULT 2132
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ID ABN08905 standard; DNA; 17 BP.
XX
XX AC ABN08905;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8897.
XX

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XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX Homo sapiens.
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 XX WO200192524-A2.
 XX
 XX 06-DEC-2001.
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 XX 25-MAY-2001; 2001WO-US016981.
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 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
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 PR 30-JAN-2001; 2001WO-US000664.
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 PR 30-JAN-2001; 2001WO-US000667.
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 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
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 XX (AEOM-) AEOMICA INC.
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 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 XX Disclosure; SEQ ID NO 8937; 214pp; English.
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP-
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
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 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 XX Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 165 ACTCGAGGTGGCCG 179
 |||||
 16 ACTCGAGGTGGCCG 2

RESULT 2133
 ABN00076/c
 ID AEN000076 standard; DNA; 17 BP.
 XX
 XX AEN000076;
 AC
 XX
 XX 29-MAY-2002 (first entry)
 DT
 XX
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:68.
 DE
 XX
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200192524-A2.
 PN
 XX
 XX 06-DEC-2001.
 PD
 XX
 XX 25-MAY-2001; 2001WO-US016981.
 PF
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001WO-US000670.
 PR
 XX
 XX (AEOM-) AEOMICA INC.
 PA
 XX
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 PI
 XX
 XX WPI; 2002-179446/23.
 DR
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT
 XX
 XX Disclosure; SEQ ID NO 68; 214pp; English.
 PS
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP-
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 XX Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
 SQ

CC at ftp.wipo.int/pub/published_pct_sequence
XX Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1181 ATGAGATGGCCACAG 1195
||||| |||||
Db 15 ATGAGATGGACACAG 1

RESULT 2134
ABN08904/c
ID ABN08904 standard; DNA; 17 BP.
XX AC ABN08904;
XX

DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8996.
XX

KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX OS Homo sapiens.
XX

PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX

PF 25-MAY-2001; 2001WO-US016981.
XX

PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001US-0266860P.
XX

PA (ABOM-) ABOMICA INC.
XX

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX WPI; 2002-179446/23.
XX

DR New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
PT
XX Disclosure; SEQ ID NO 8896; 214pp; English.
PS

CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
XX

CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX

SQ Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 165 ACTCCGAGGTGGCG 179
||||| |||||
Db 17 ACTCGGAGGTGGCG 3

RESULT 2135
ABQ63456/c
ID ABQ63456 standard; DNA; 17 BP.
XX AC ABQ63456;
XX

DT 20-AUG-2002 (first entry)
XX
DE Human KTOM1a portion (ABQ63232) probe # 169.
XX

KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX OS Homo sapiens.
XX

PN WO200224750-A2.
XX
PD 28-MAR-2002.
XX

PF 21-SEP-2001; 2001WO-US029656.
XX

PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 28-AUG-2001; 2001US-0315676P.
XX

PA (ABOM-) ABOMICA INC.
XX

PI Zhang J;
XX
XX WPI; 2002-479509/51.
XX

DR New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT acids encoding the protein, useful for treating subjects having defects
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT e.g., liver or bone.
XX

two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP: 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

protein (HTPL, see ABV78759 to ABV78762 and AB098519 to AB098520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTP proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP; 0 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 40 GCAGGAGGACCAGCA 54
Db 15 GCAGGAGGAGACAGCA 1
|||||

RESULT 2139
ABK19255
ID ABK19255 standard; RNA; 17 BP.
XX
AC ABK19255;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG Amberzyme target sequence Seq ID No 1902.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antihartific; antipsoriatic; virucide; osteopathic;
KW vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
DR
XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge syndrome.
XX
XX Claim 4; Page 124; 149pp; English.
XX

CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 SQ Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1242 CATCTTCGATCTT 1256
 Db 3 CATCTTCCTATCTT 17
 RESULT 2142
 ABV91092/c
 ID ABV91092 standard; DNA; 17 BP.
 AC ABV91092;
 XX
 DT 23-DEC-2002 (first entry)
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1805.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 DN EP1239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 FI Shannon M;
 XX
 WPI; 2002-684061/74.
 XX
 DR Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 PS Example 2; SEQ ID NO 1805; 60pp + Sequence Listing; English.
 XX

CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (SI, ABB93999) a sequence having 65% sequence identity to (S1),
 CC (SI) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 SQ Sequence 17 BP; 8 A; 1 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1451 ATCCATCTTCTCTCA 1465
 Db 16 ATCCATCTTCTCTCA 2
 RESULT 2143
 ABV91093/c
 ID ABV91093 standard; DNA; 17 BP.
 AC ABV91093;
 XX
 DT 23-DEC-2002 (first entry)
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1806.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 DN EP1239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 FI Shannon M;
 XX
 WPI; 2002-684061/74.
 XX
 DR Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX

```

XX PS Example 2; SEQ ID NO 1806; 60pp + Sequence Listing; English.
XX PS
XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
XX CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
XX CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
XX CC (SI) having 95% deviations, especially conservative substitutions or a
XX CC fragment of the sequences comprising at least 8 contiguous amino acids.
XX CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
XX CC adaptor protein that interacts with Rho family small GTPases as well as
XX CC downstream components of the signal transduction pathway. (I) is useful
XX CC for identifying a specific binding partner. (I) and nucleic acids (II)
XX CC encoding (I) are useful for diagnosing, monitoring disease and treating
XX CC caused by altered expression of human POSHL1 including diagnosing and
XX CC treating cancer, they are useful in the development of vaccines and (II) is
XX CC useful in gene therapy. (II) is useful for constructing microarrays which
XX CC are useful for measuring and for surveying gene expression and creating
XX CC transgenic non-human animals capable of producing the proteins. The
XX CC present sequence is that of a scanning oligonucleotide useful in examples
XX CC of the invention. Note: The present sequence did not form part of the
XX CC printed specification, but is based on sequence information supplied to
XX CC Derwent by the European Patent Office
XX SQ Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1451 ATCCATCTCTCTCA 1465
Db 15 ATCCATCTCTCTCA 1

RESULT 2144
ABV90265
ID ABV90265 standard; DNA; 17 BP.
AC ABV90265;
XX
XX 23-DEC-2002 (first entry)
DT
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 978.
DE
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
XX Homo sapiens.
XX
XX EP1239051-A2.
XX
XX 11-SEP-2002.
XX
XX 28-JAN-2002; 2002EP-00001165.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M;
XX WPI; 2002-684061/74.
XX

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PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
XX Example 2; SEQ ID NO 978; 60pp + Sequence Listing; English.
XX
XX The invention relates to an isolated SH3 domain (POSH)-like signalling
XX CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
XX CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
XX CC (SI) having 95% deviations, especially conservative substitutions or a
XX CC fragment of the sequences comprising at least 8 contiguous amino acids.
XX CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
XX CC adaptor protein that interacts with Rho family small GTPases as well as
XX CC downstream components of the signal transduction pathway. (I) is useful
XX CC for identifying a specific binding partner. (I) and nucleic acids (II)
XX CC encoding (I) are useful for diagnosing, monitoring disease and treating
XX CC caused by altered expression of human POSHL1 including diagnosing and
XX CC treating cancer, they are useful in the development of vaccines and (II) is
XX CC useful in gene therapy. (II) is useful for constructing microarrays which
XX CC are useful for measuring and for surveying gene expression and creating
XX CC transgenic non-human animals capable of producing the proteins. The
XX CC present sequence is that of a scanning oligonucleotide useful in examples
XX CC of the invention. Note: The present sequence did not form part of the
XX CC printed specification, but is based on sequence information supplied to
XX CC Derwent by the European Patent Office
XX SQ Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1242 CATCTCCGTATCTT 1256
Db 2 CATCTCCGTATCTT 16

RESULT 2145
ABV90266
ID ABV90266 standard; DNA; 17 BP.
AC ABV90266;
XX
XX 23-DEC-2002 (first entry)
DT
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 979.
DE
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
XX Homo sapiens.
XX
XX EP1239051-A2.
XX
XX 11-SEP-2002.
XX
XX 28-JAN-2002; 2002EP-00001165.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M;
XX

```

XX WPI; 2002-684061/74.
 DR
 XX
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 XX Example 2; SEQ ID NO 979; 60pp + Sequence Listing; English.
 PS
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they are useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 XX Sequence 17 BP; 2 A; 6 C; 1 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1242 CATCTTCGATCTT 1256
 Db 1 CACTTCCTATCTT 15
 RESULT 2146
 ABV91091/c
 ID ABV91091 standard; DNA; 17 BP.
 XX
 XX AC ABV91091;
 XX
 XX 23-DEC-2002 (first entry)
 DT
 XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1804.
 DE
 XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 XX Homo sapiens.
 OS
 XX EPI2339051-A2.
 FN
 XX 11-SEP-2002.
 PD
 XX 28-JAN-2002; 2002EP-00001165.
 PF
 XX 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX

PA (AEOM-) AEOMICA INC.
 XX
 XX Shannon M;
 XX WPI; 2002-684061/74.
 DR
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 XX Example 2; SEQ ID NO 1804; 60pp + Sequence Listing; English.
 PS
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they are useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 XX Sequence 17 BP; 8 A; 1 C; 5 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1451 ATCCATCTTCTCTCA 1465
 Db 17 ATCCATCTTCTCTCA 3
 RESULT 2147
 AAS18424/c
 ID AAS18424 standard; DNA; 17 BP.
 XX
 XX AC AAS18424;
 XX
 XX 12-MAR-2002 (first entry)
 DT
 XX Degenerate PCR primer #2 used to amplify DNA encoding human chkl.
 DE
 XX Human; checkpoint protein; hchk1; DNA damage; chromosome 11q24;
 KW cell cycle checkpoint pathway; inhibition of cell growth; tumour;
 KW malignancy; growth deficiency; development deficiency; PCR primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX US6307015-B1.
 FN
 XX 23-OCT-2001.
 PD
 XX 12-JAN-2000; 2000US-00488364.
 PF
 XX 05-SEP-1997; 97US-00924183.
 PR
 XX (BAYU) BAYLOR COLLEGE MEDICINE.
 PA
 XX Elledge SJ, Sanchez Y;
 PI
 XX WPI; 2002-040207/05.
 DR
 XX

PT New mammalian checkpoint protein and gene, for generating specific
PT antibodies or for inhibiting the growth of cells, and for use as a probe
PT for a portion of a chromosome associated with tumors or malignancies.

XX Example 1; Col 24; 39pp; English.

CC The present invention relates to the isolation of human and mouse
CC checkpoint (chk1) proteins and the nucleic acid sequences encoding them.
CC Human chk1 (hchk1) maps to chromosome 11q24. Chk1 is involved in cellular
CC responses to DNA damage, in the cell cycle checkpoint pathway. The
CC protein is useful for generating specific antibodies and for inhibiting
CC the growth of cells. The nucleotide sequence encoding the protein may be
CC used as a probe for a portion of the chromosome associated with tumors
CC and other malignancies, as well as growth and/or development
CC deficiencies. The present sequence represents a degenerate PCR primer
CC used to amplify DNA encoding human chk1 protein

XX Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCC 1047

DB 17 GACTTTGGCTGGCC 3

RESULT 2148

ABK57291

ID ABK57291 standard; RNA; 17 BP.

AC ABK57291;

XX 02-JUL-2002 (first entry)

DE Human CLCA1 gene enzymatic nucleic acid #1662.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.

XX Homo sapiens.

XX WO200211674-A2.

XX 14-FEB-2002.

XX 09-AUG-2001; 2001WO-US024970.

XX 09-AUG-2000; 2000US-0224383P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (SYNT) SYNTEX USA LLC.

XX (THOM/) THOMPSON J.

XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

PI Grupe A;

XX WPI; 2002-217145/27.

PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.

XX Claim 4; Page 110; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic

CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
XX enzymatic nucleic acid molecule of the invention

SQ Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 605 AACTGGAGACCTACA 619

DB 1 AACUUGAGACCUACA 15

RESULT 2149

ABK56866

ID ABK56866 standard; RNA; 17 BP.

AC ABK56866;

XX 02-JUL-2002 (first entry)

DE Human CLCA1 gene enzymatic nucleic acid #1237.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.

XX Homo sapiens.

XX WO200211674-A2.

XX 14-FEB-2002.

XX 09-AUG-2001; 2001WO-US024970.

XX 09-AUG-2000; 2000US-0224383P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (SYNT) SYNTEX USA LLC.

XX (THOM/) THOMPSON J.

XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

PI Grupe A;

XX WPI; 2002-217145/27.

PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.

XX Claim 4; Page 84; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 CC
 CC Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 80.8%; Pred. NO. 1.1e+03;
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 604 AACTGGAGACCTAC 618

||||: |||||: ||
 Db 3 AATCUGAGACCUAC 17

RESULT 2150

ABK56439

ID ABK56439 standard; RNA; 17 BP.

XX

AC ABK56439;

XX

DT 02-JUL-2002 (first entry)

XX

DE Human CLCA1 gene enzymatic nucleic acid #810.

XX

KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.

XX

OS Homo sapiens.

XX

PN WO200211674-A2.

XX

PD 14-FEB-2002.

XX

PF 09-AUG-2001; 2001WO-US024970.

XX

PR 09-AUG-2000; 2000US-0224383P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA

PA (SYNT) SYNTEX USA LLC.

PA

PA (THOM/) THOMPSON J.

XX

PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

PI

PI Grupe A;

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CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 CC
 CC Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 73.3%; Pred. NO. 1.1e+03;
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1577 GCAGGCCAGCTTCC 1591

||||: |||||: ||
 Db 2 GCAGGCCAGCUUUC 16

RESULT 2151

ABK57129

ID ABK57129 standard; RNA; 17 BP.

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AC ABK57129;

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Enzymatic polynucleotide that down regulates expression of chloride
 channel calcium activated gene, useful for treating Chronic obstructive
 pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 96; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down
 regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 by cleaving RNA derived from the genes. The nucleic acid sequences are
 useful as pharmaceutical agents for treating conditions such as chronic
 obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 fibrosis, obstructive bowel syndrome and any other diseases or conditions
 that are related to or will respond to the levels of CLCA1 in a cell or
 tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 hence, are useful for treatment of a patient having a condition
 associated with the level of CLCA1, where the invention further comprises
 the use of one or more therapies under conditions suitable for the
 treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The

CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 1.1e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1577 GCAGGCCAGCTTCC 1591
Db 1 GCAGGCCAGCUUUC 15
RESULT 2152
ABK57182
ID ABK57182 standard; RNA; 17 BP.
XX
AC ABK57182;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #1553.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 98; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an

CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 8 A; 5 C; 3 G; 0 T; 1 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 672 AAGCAAGCTCAGCA 686
Db 3 AAGCAAGCTCAGCA 17
RESULT 2153
ABK55967
ID ABK55967 standard; RNA; 17 BP.
XX
AC ABK55967;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #338.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 59; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
XX
SQ Sequence 17 BP; 7 A; 6 C; 2 G; 0 T; 2 U; 0 Other;

```
Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 673 AGCAAGCTCACAGAC 687
    |||||:|||||
Db 1 AGCAAGCUCACAAAC 15

RESULT 2154
ACN00811
ID ACN00811 standard; RNA; 17 BP.
XX AC
AC ACN00811;
XX XX
DT 22-APR-2004 (first entry)
XX XX
DE WNV Hammerhead Ribozyme substrate SEQ ID NO 801.
XX XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX XX
OS West Nile Virus.
XX XX
PN WO200268637-A2.
XX XX
PD 06-SEP-2002.
XX XX
PF 19-OCT-2001; 2001WO-US048350.
XX XX
PR 20-OCT-2000; 2000US-0242411P.
XX XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX XX
PI Blatt L, Mcswiggen JA;
XX XX
WPI; 2002-706994/76.
XX XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX XX
PS Claim 23; SEQ ID NO 801; 495pp; English.
XX XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX XX
SQ Sequence 17 BP; 7 A; 6 C; 2 G; 0 T; 2 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 890 ACATCATCAACATGC 904
    |||||:|||||
```

```
Db 2 ACAACAUCACAUUGC 16

RESULT 2155
ACN13778
ID ACN13778 standard; RNA; 17 BP.
XX AC
AC ACN13778;
XX XX
DT 22-APR-2004 (first entry)
XX XX
DE WNV minus strand DNazyme substrate SEQ ID NO 13781.
XX XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX XX
OS West Nile Virus.
XX XX
PN WO200268637-A2.
XX XX
PD 06-SEP-2002.
XX XX
PF 19-OCT-2001; 2001WO-US048350.
XX XX
PR 20-OCT-2000; 2000US-0242411P.
XX XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX XX
PI Blatt L, Mcswiggen JA;
XX XX
WPI; 2002-706994/76.
XX XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX XX
PS Claim 23; SEQ ID NO 13781; 495pp; English.
XX XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX XX
SQ Sequence 17 BP; 6 A; 9 C; 2 G; 0 T; 0 U; 0 Other;

Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 429 CAACATCCCCCAGC 443
    |||||:|||||
Db 3 CAACCAACCCCCAGC 17

RESULT 2156
ACN08355/C
ID ACN08355 standard; RNA; 17 BP.
XX XX
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AC ACN08355;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 8358.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-024241P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8358; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 2 A; 1 C; 6 G; 0 T; 8 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 890 ACATCATCAACATGC 904
DB 17 ACATCATCAACATGC 3

RESULT 2157
ACN12834/c
ID ACN12834 standard; RNA; 17 BP.
XX
XX ACN12834;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Zinzyme substrate SEQ ID NO 12837.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;

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KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-024241P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 12837; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 4 A; 8 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1638 GCAGCGGCTGGAGGG 1652
DB 16 GCAGCGGCTGGAGTG 2

RESULT 2158
ACN04167
ID ACN04167 standard; RNA; 17 BP.
XX
XX ACN04167;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Zinzyme substrate SEQ ID NO 4170.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.

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PN WO200268637-A2.
XX
XX
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 4170; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 2 A; 3 C; 8 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1638 GCAGCGCGCTGGAGGG 1652
DB 3 GCAGCGCGCTGGAGUG 17
RESULT 2159
ACN10716/C
ID ACN10716 standard; RNA; 17 BP.
XX
XX ACN10716;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Inozyme substrate SEQ ID NO 10719.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 2 A; 3 C; 8 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1638 GCAGCGCGCTGGAGGG 1652
DB 3 GCAGCGCGCTGGAGUG 17
RESULT 2159
ACN10716/C
ID ACN10716 standard; RNA; 17 BP.
XX
XX ACN10716;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Inozyme substrate SEQ ID NO 10719.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1638 GCAGCGCGCTGGAGGG 1652
DB 17 GCAGCGCGCTGGAGTG 3
RESULT 2160
ACN11881/C
ID ACN11881 standard; RNA; 17 BP.
XX
XX ACN11881;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Inozyme substrate SEQ ID NO 11884.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1638 GCAGCGCGCTGGAGGG 1652
DB 17 GCAGCGCGCTGGAGTG 3

```

DR WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus

XX (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX

PS Claim 23; SEQ ID NO 11884; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The

CC nucleic acid molecules further comprise at least five ribose residues, at

CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at

CC least three of the 5' terminal nucleotides and a 3' end modification of a

CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given

CC in the specification. The present sequence is that of a nucleic acid

CC molecule of the invention

XX

SQ Sequence 17 BP; 4 A; 4 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 1.1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 878 ATGACTGTGGGAACA 892

DB 17 ATGACTGTGGGAACA 3

RESULT 2161

ACN01704

ID ACN01704 standard; RNA; 17 BP.

AC ACN01704;

AC ACN01704;

DT 22-APR-2004 (first entry)

XX WNV Inozyme substrate SEQ ID NO 1694.

DE

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;

KW virucide; neuroprotective; antibacterial; replication; pancreatitis;

KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;

KW Amberzyme; Zinzyme; ss.

XX

OS West Nile Virus.

XX

PN WO200268637-A2.

XX

PD 06-SEP-2002.

XX

PF 19-OCT-2001; 2001WO-US048350.

XX

PR 20-OCT-2000; 2000US-0242411P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX

PI Blatt L, Mcswiggen JA;

XX

DR WPI; 2002-706994/76.

XX

CC New nucleic acid molecule that modulates replication of West Nile Virus

CC (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX

PS Claim 23; SEQ ID NO 1694; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The

CC nucleic acid molecules further comprise at least five ribose residues, at

CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at

CC least three of the 5' terminal nucleotides and a 3' end modification of a

CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given

CC in the specification. The present sequence is that of a nucleic acid

CC molecule of the invention

XX

SQ Sequence 17 BP; 4 A; 2 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 73.3%; Pred. No. 1.1e+03;

Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 877 GATGACTGTGGGAAC 891

DB 3 GAUGACUGUGGAAC 17

RESULT 2162

ACN00210

ID ACN00210 standard; RNA; 17 BP.

XX ACN00210;

AC ACN00210;

XX

DT 22-APR-2004 (first entry)

XX

DE WNV Hammerhead Ribozyme substrate SEQ ID NO 200.

XX

KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;

KW virucide; neuroprotective; antibacterial; replication; pancreatitis;

KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;

KW Amberzyme; Zinzyme; ss.

XX

OS West Nile Virus.

XX

PN WO200268637-A2.

XX

PD 06-SEP-2002.

XX

PF 19-OCT-2001; 2001WO-US048350.

XX

PR 20-OCT-2000; 2000US-0242411P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX

PI Blatt L, Mcswiggen JA;

XX

DR WPI; 2002-706994/76.

XX

PT New nucleic acid molecule that modulates replication of West Nile Virus

PT (WNV), useful for treating a condition related to WNV infection e.g.

PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX

PS Claim 23; SEQ ID NO 200; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication

CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid

CC molecule is selected from the group of ribozymes consisting of

CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention

XX
SQ Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 1.1e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 878 ATGACTGTGGGAACA 892
1 AUGACUGUGGAACA 15

Db

RESULT 2163
ACN02575
ID ACN02575 standard; RNA; 17 BP.
XX
AC ACN02575;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Inozyme substrate SEQ ID NO 2578.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN W0200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 2578; 495pp; English.

CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention

XX
SQ Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 1.1e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

CC molecule of the invention

XX
SQ Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.1e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1638 GCAGCGCTGGAGGG 1652
1 GCAGCGCGUGGAGUG 15

Db

RESULT 2164
ACN14682/C
ID ACN14682 standard; RNA; 17 BP.
XX
AC ACN14682;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV minus strand Amberzyme substrate SEQ ID NO 14685.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN W0200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 14685; 495pp; English.

CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention

XX
SQ Sequence 17 BP; 2 A; 2 C; 6 G; 0 T; 7 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

| | | | |
|-------------|-------------|---|-----|
| QY | 890 | ACATCATCAACATGC | 904 |
| DG | 16 | ACAACATCAACATGC | 2 |
| RESULT 2165 | | | |
| ID | ACN02546 | standard; RNA; 17 BP. | |
| XX | AC | ACN02546; | |
| XX | AC | ACN02546; | |
| DT | 22-APR-2004 | (first entry) | |
| XX | WNV | Inozyme substrate SEQ ID NO 2549. | |
| DE | XX | WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; | |
| KW | KW | virucide; neuroprotective; antibacterial; replication; pancreatitis; | |
| KW | KW | encephalitis; myocarditis; meningitis; infection; hepatitis; | |
| KW | KW | liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; | |
| KW | KW | Amberzyme; Zinzyme; ss. | |
| OS | XX | West Nile Virus. | |
| XX | XX | WO200268637-A2. | |
| PN | XX | 06-SEP-2002. | |
| PD | XX | 19-OCT-2001; 2001WO-US048350. | |
| PF | XX | 20-OCT-2000; 2000US-0242411P. | |
| PR | XX | (RIBO-) RIBOZYME PHARM INC. | |
| PA | PA | (BLAT/) BLATT L. | |
| PA | PA | (MCSW/) MCSWIGGEN J A. | |
| XX | XX | Blatt L, Mcswiggen JA; | |
| PI | XX | WPI; 2002-706994/76. | |
| DR | XX | New nucleic acid molecule that modulates replication of West Nile Virus | |
| XX | XX | (WNV), useful for treating a condition related to WNV infection e.g. | |
| PT | PT | pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis. | |
| PT | PT | Claim 23; SEQ ID NO 2549; 495pp; English. | |
| PS | XX | The invention relates to nucleic acid molecules that modulate replication | |
| CC | CC | of the West Nile Virus (WNV). The nucleic acid molecules are useful for | |
| CC | CC | treating a condition related to WNV infection e.g. pancreatitis, | |
| CC | CC | encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, | |
| CC | CC | liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid | |
| CC | CC | molecule is selected from the group of ribozymes consisting of | |
| CC | CC | Hammerhead, Inozyme, G-Cleaver, DNazyme, Amberzyme and Zinzyme. The | |
| CC | CC | nucleic acid molecules further comprise at least five ribose residues, at | |
| CC | CC | least ten 2'-O-methyl modifications, phosphorothioate linkages on at | |
| CC | CC | least three of the 5' terminal nucleotides and a 3' end modification of a | |
| CC | CC | 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 | |
| CC | CC | are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given | |
| CC | CC | in the specification. The present sequence is that of a nucleic acid | |
| CC | CC | molecule of the invention | |
| XX | XX | Sequence 17 BP; 8 A; 6 C; 1 G; 0 T; 2 U; 0 Other; | |
| SQ | SQ | Query Match 0.8%; Score 13.4; DB 1; Length 17; | |
| | | Best Local Similarity 80.0%; Pred. No. 1.le+03; | |
| | | Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0; | |
| QY | 890 | ACATCATCAACATGC | 904 |
| DG | 1 | ACAACATCAACATGC | 15 |
| RESULT 2166 | | | |

DE Tumour suppression related human fukutin oligo SEQ ID No 1326.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 XX 27-MAR-2003.
 PD
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 XX 17-SEP-2001; 2001FR-00011978.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Teلمان A, Amson R, Tuijnder M;
 PI
 XX WPI; 2003-313353/30.
 DR
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 XX Disclosure; Page 188; 720pp; French.
 PS
 XX
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optional
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 2 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1527 TCAGCTACAAAGGA 1541
 Db ||||| ||||| |||||
 17 TCAGCAACAAAGGA 3
 RESULT 2168
 ACA06589/c
 ID ACA06589 standard; RNA; 17 BP.
 AC ACA06589;
 XX
 XX 03-JUN-2003 (first entry)
 DT
 XX NPKB sub-unit modulating inozyme substrate #408.
 DE
 XX

KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2002177568-A1.
 PN
 XX
 XX 28-NOV-2002.
 PD
 XX
 XX 23-MAY-2001; 2001US-00864785.
 PF
 XX 07-DEC-1992; 92US-00987132.
 PR
 XX 18-MAY-1994; 94US-00245466.
 PR
 XX 15-AUG-1994; 94US-00291932.
 PR
 XX 23-DEC-1996; 96US-00777916.
 PR
 XX (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 PA
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 PI
 XX WPI; 2003-340953/32.
 DR
 XX
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.
 PT
 XX Claim 3; Page 33; 72pp; English.
 PS
 XX The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX
 SQ Sequence 17 BP; 3 A; 3 C; 6 G; 0 T; 5 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 142 ATCAACGGCAGCTG 156

```
Db      16 ATCAAACTGCAGCTG 2
RESULT 2169
ACAO7774/C
ID      ACAO7774 standard; RNA; 17 BP.
XX
XX      ACAO7774;
AC
XX
XX      03-JUN-2003 (first entry)
DT
XX
XX      NFKB sub-unit modulating zinzyme substrate #173.
DE
XX
XX      Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW      G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW      lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW      oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW      cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW      lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW      chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW      cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW      gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW      rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW      gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW      transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW      allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2002177568-A1.
PN
XX
XX      28-NOV-2002.
PD
XX
XX      23-MAY-2001; 2001US-00864785.
PF
XX
XX      07-DEC-1992; 92US-00987132.
PR
XX      18-MAY-1994; 94US-00245466.
PR
XX      15-AUG-1994; 94US-00291932.
PR
XX      23-DEC-1996; 96US-00777916.
XX
XX      (STIN/) STINCHOMB D T.
PA      (MCSW/) MCSWIGGEN J.
PA      (DRAP/) DRAPER K G.
XX
XX      Stinchcomb DT, Mcswiggen J, Draper KG;
PI
XX
XX      WPI; 2003-340953/32.
DR
XX
XX      Novel enzymatic nucleic acid molecules which down regulates expression of
PT      a sequence encoding a subunit of nuclear factor kappa B useful for
PT      treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX      Claim 3; Page 40; 72pp; English.
XX
XX      The invention describes an enzymatic nucleic acid molecule (I) which down
CC      regulates expression of a sequence encoding a subunit of nuclear factor
CC      kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC      configuration. The enzymatic nucleic acid molecule is adapted to treat
CC      cancer and is useful for down-regulating REL-A activity in a cell, for
CC      treating a patient having a condition associated with the level of REL-A.
CC      (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC      the presence of a divalent cation, especially Mg2+. The enzymatic and
CC      antisense nucleic acid molecules are useful for treating breast, lung,
CC      prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC      cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC      multidrug resistant cancer. The method involves use of other drug
CC      therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC      chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC      cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC      gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC      acid molecules are also useful for treating inflammatory disease such as
CC      rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
```

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CC      obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC      rejection, gene therapy applications, ischaemia/reperfusion injury
CC      (central nervous system (CNS) and myocardial), glomerulonephritis,
CC      sepsis, allergic airway inflammation, inflammatory bowel disease or
CC      infection. This sequence represents the substrate of a novel enzymatic
CC      nucleic acid molecule
XX
XX      Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
SQ
Query Match      0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      142 ATCAACGGCAGCTG 156
DB      ||||| |||||
      15 ATCAAACTGCAGCTG 1
RESULT 2170
ACAO8921
ID      ACAO8921 standard; RNA; 17 BP.
XX
XX      ACAO8921;
AC
XX
XX      03-JUN-2003 (first entry)
DT
XX
XX      NFKB sub-unit modulating amberzyme substrate #84.
DE
XX
XX      Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW      G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW      lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW      oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW      cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW      lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW      chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW      cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW      gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW      rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW      gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW      transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW      allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2002177568-A1.
PN
XX
XX      28-NOV-2002.
PD
XX
XX      23-MAY-2001; 2001US-00864785.
PF
XX
XX      07-DEC-1992; 92US-00987132.
PR
XX      18-MAY-1994; 94US-00245466.
PR
XX      15-AUG-1994; 94US-00291932.
PR
XX      23-DEC-1996; 96US-00777916.
XX
XX      (STIN/) STINCHOMB D T.
PA      (MCSW/) MCSWIGGEN J.
PA      (DRAP/) DRAPER K G.
XX
XX      Stinchcomb DT, Mcswiggen J, Draper KG;
PI
XX
XX      WPI; 2003-340953/32.
DR
XX
XX      Novel enzymatic nucleic acid molecules which down regulates expression of
PT      a sequence encoding a subunit of nuclear factor kappa B useful for
PT      treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX      Claim 3; Page 51; 72pp; English.
XX
XX      The invention describes an enzymatic nucleic acid molecule (I) which down
CC      regulates expression of a sequence encoding a subunit of nuclear factor
CC      kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC      configuration. The enzymatic nucleic acid molecule is adapted to treat
CC      cancer and is useful for down-regulating REL-A activity in a cell, for
CC      treating a patient having a condition associated with the level of REL-A.
CC      (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC      the presence of a divalent cation, especially Mg2+. The enzymatic and
CC      antisense nucleic acid molecules are useful for treating breast, lung,
CC      prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC      cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC      multidrug resistant cancer. The method involves use of other drug
CC      therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC      chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC      cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC      gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC      acid molecules are also useful for treating inflammatory disease such as
CC      rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
```

CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, retinosis, asthma, Crohn's disease, diabetes
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule

XX
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 66.7%; Pred. No. 1.1e+03;
 Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 539 CCATCTTTGACAGC 553
 DB 1 CCAUCUUGACAAUC 15
 |||:|:|:|:|:|

RESULT 2171
 ABZ65140/c
 ID ABZ65140 standard; RNA; 17 BP.

XX AC ABZ65140;

XX DT 21-MAR-2003 (first entry)

XX DE Human HER2 DNzyme substrate #597.

XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
 KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.

XX PN WO200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Mcswiggen J;

XX DR WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX PS Claim 4; Page 144; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention

XX SQ Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGTGG 941

DB 16 CCAGCTGCACCGTGG 2

RESULT 2172

ABZ61477/c

ID ABZ61477 standard; RNA; 17 BP.

XX AC ABZ61477;

XX DT 21-MAR-2003 (first entry)

XX DE Human H-Ras DNzyme target #268.

XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
 KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.

XX PN WO200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Mcswiggen J;

XX DR WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX PS Claim 58; Page 116; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention

XX SQ Sequence 17 BP; 1 A; 8 C; 7 G; 0 T; 1 U; 0 Other;


```
Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 80 GGCCCGCGGCTCTG 94
DB 16 GGCCCGCGGCTCTG 2

RESULT 2173
ABZ62006/c
ID ABZ62006 standard; RNA; 17 BP.
XX AC ABZ62006;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNzyme target #797.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 126; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 752 GGGAGGTGTCCTGC 766
DB 15 GGGAGGTGTCCTGC 1

RESULT 2174
ABZ64791
ID ABZ64791 standard; RNA; 17 BP.
XX AC ABZ64791;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNzyme substrate #248.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 4; Page 137; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 1.1e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 49 CCAGCAGTGTGCTG 63
DB 3 CCAGCUGUGACUG 17

RESULT 2175
ABZ62005/c
ID ABZ62005 standard; RNA; 17 BP.
XX AC ABZ62005;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNzyme target #796.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
```


KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX

OS Hepatitis B virus.

XX

PN WO200281494-A1.

XX

PD 17-OCT-2002.

XX

PF 26-MAR-2002; 2002WO-US009187.

XX

PR 26-MAR-2001; 2001US-00817879.

XX

PR 08-JUN-2001; 2001US-00877478.

XX

PR 08-JUN-2001; 2001US-0296876P.

XX

PR 24-OCT-2001; 2001US-0335059P.

XX

PR 05-DEC-2001; 2001US-0337055P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PA (BLAT/) BLATT L.

XX

PA (MACE/) MACEJAK D.

XX

PA (MCSW/) MCSWIGGEN J.

XX

PA (MORR/) MORRISSEY D.

XX

PA (PAVC/) PAVCO P.

XX

PA (LEEP/) LEE P.

XX

PA (DRAP/) DRAPER K.

XX

PA (ROBE/) ROBERTS E.

XX

XX

PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX

PI Draper K, Roberts E;

XX

DR WPI; 2003-229207/22.

XX

XX

PT Novel compound useful for treating cirrhosis, liver failure,

XX

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

XX

PT infection.

XX

PS Example 1; Page 204; 387pp; English.

XX

XX

CC The present invention relates to nucleic acid molecules which modulate

XX

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

XX

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

XX

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

XX

CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

XX

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

XX

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

XX

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

XX

CC DNA. The nucleic acids may be used to modulate the expression of HBV

XX

CC genes and HBV viral replication. Also disclosed is a method for screening

XX

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

XX

CC disease states related to HBV and HCV infection, replication and gene

XX

CC expression such as cirrhosis, liver failure, and hepatocellular

XX

CC carcinoma. The present sequence represents a substrate for one of the HBV

XX

CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences

XX

CC disclosed in the present invention

XX

SQ Sequence 17 BP; 6 A; 2 C; 5 G; 0 T; 4 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 17;

XX

Best Local Similarity 93.3%; Pred. No. 1.1e-03;

XX

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX

OY 532 AATAGCCCCATCTTT 546

XX

Db ||||| ||||| ||||| ||||| |||||

XX

15 AATATCCCCATCTTT 1

XX

RESULT 2178

ACD55494/C

ID ACD55494 standard; RNA; 17 BP.

XX

AC ACD55494;

XX

DT 23-SEP-2003 (first entry)

XX

XX

DE HBV amberzyme substrate sequence #78.

XX

XX

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX

KW RNA stability; RNA expression; RNA synthesis; antisense;

XX

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;

XX

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

XX

KW HBV reverse transcriptase; Enhancer I region; viral replication;

XX

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

XX

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

XX

XX virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

XX

PN WO200281494-A1.

XX

PD 17-OCT-2002.

XX

PF 26-MAR-2002; 2002WO-US009187.

XX

XX

PR 26-MAR-2001; 2001US-00817879.

XX

PR 08-JUN-2001; 2001US-00877478.

XX

PR 08-JUN-2001; 2001US-0296876P.

XX

PR 24-OCT-2001; 2001US-0335059P.

XX

PR 05-DEC-2001; 2001US-0337055P.

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PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

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PI Draper K, Roberts E;

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XX

DR WPI; 2003-229207/22.

XX

XX

PT Novel compound useful for treating cirrhosis, liver failure,

XX

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

XX

PT infection.

XX

PS Example 1; Page 204; 387pp; English.

XX

XX

CC The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

XX

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

XX

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

XX

CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

XX

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

XX

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

XX

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

XX

CC DNA. The nucleic acids may be used to modulate the expression of HBV

XX

CC genes and HBV viral replication. Also disclosed is a method for screening

XX

CC compounds and/or potential therapies directed against HBV, and compounds

XX

CC that modulate the expression and/or replication of HCV. The compounds and

XX

CC methods of the invention are useful for the treatment of degenerative and

XX

CC disease states related to HBV and HCV infection, replication and gene

XX

CC expression such as cirrhosis, liver failure, and hepatocellular

XX

CC carcinoma. The present sequence represents a substrate for one of the HBV

XX

CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences

XX

CC disclosed in the present invention

XX

SQ Sequence 17 BP; 7 A; 1 C; 5 G; 0 T; 4 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 532 AATAGCCCCATCTTT 546
DB 16 AATATCCCCATCTTT 2

RESULT 2179
ACD58065/C
ID ACD58065 standard; RNA; 17 BP.
XX
XX ACD58065;
XX
DT 23-SEP-2003 (first entry)
XX
DE HCV DNAzyme substrate sequence #651.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
XX 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 245; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1434 AGAGGATGCCATGAA 1448
DB 17 AGAGGATGCCATGCA 3

RESULT 2180
ACD64603
ID ACD64603 standard; RNA; 17 BP.
XX
XX ACD64603;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1626.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
XX 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX

Claim 1; Page 304; 387pp; English.

PA The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC expression states related to HBV and HCV infection, replication and gene
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
XX invention
SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1432 GCAGAGGATGCCATG 1446

Db 2 GGAGAGGAUGCCAUG 16

RESULT 2181

ACD51807

ID ACD51807 standard; RNA; 17 BP.

AC ACD51807;

DT 24-SEP-2003 (first entry)

DE HBV inozyme substrate sequence #90.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

XX 08-JUN-2001; 2001US-00877478.

XX 08-JUN-2001; 2001US-0296876P.

XX 24-OCT-2001; 2001US-0335059P.

XX 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

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PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Example 1; Page 151; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberyne sequences
CC disclosed in the present invention

SQ Sequence 17 BP; 4 A; 7 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;

Best Local Similarity 66.7%; Pred. No. 1.1e+03;

Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1390 CTCACCAAGCTGTG 1404

Db 3 CUCACCAACCGUG 17

RESULT 2182

ACD55493/C

ID ACD55493 standard; RNA; 17 BP.

AC ACD55493;

DT 23-SEP-2003 (first entry)

DE HBV amberyne substrate sequence #77.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

XX 08-JUN-2001; 2001US-00877478.

XX 08-JUN-2001; 2001US-0296876P.

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PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
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PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Example 1; Page 204; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 8 A; 0 C; 5 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 532 AATAGCCCATCTTT 546
DB ||||| ||||| ||||| |||||
17 AATATCCCCCATCTTT 3

RESULT 2183
ACD54462
ID ACD54462 standard; RNA; 17 BP.
XX
XX ACD54462;
XX
XX 24-SEP-2003 (first entry)
XX
XX HBV DNazyme substrate sequence #21.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX

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OS Hepatitis B virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
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XX 24-OCT-2001; 2001US-0335059P.
XX
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
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PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Example 1; Page 184; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1390 CTCACCAAGCTGTG 1404
DB ||||| ||||| ||||| |||||
2 CUCACCAACGUGUG 16

RESULT 2184
ACD64765/c
ID ACC64765 standard; DNA; 17 BP.
XX
XX ACC64765;
XX
XX 01-JUL-2003 (first entry)
XX

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```
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6886), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 2 A; 10 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1468 CTGGGGGAGGGATC 1482
Db 15 CTGGGGGAGGGATC 1
RESULT 2187
ABX16354/c
ID ABX16354 standard; DNA; 17 BP.
XX
XX AC ABX16354;
XX
XX 08-APR-2003 (first entry)
XX
XX Human checkpoint gene Chk1 PCR primer #2.
XX
XX Human; checkpoint; chk1; anti-Chk1 antibody; tumour; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002156247-A1.
XX
XX 24-OCT-2002.
XX
XX 12-DEC-2001; 2001US-00020038.
XX
XX 12-JAN-2000; 2000US-00488364.
XX
XX (ELLE/) ELLEDGE S J.
XX
XX (SANC/) SANCHEZ Y.
XX
XX Elledge SJ, Sanchez Y;
XX
XX WPI; 2003-182651/18.
XX
XX New anti-Chk1 antibody, that may be a monoclonal or polyclonal antibody,
XX useful for detecting a Chk1 protein that is associated with a tumor.
XX
XX Example 1; Page 13; 28pp; English.
XX
XX The invention describes an anti-Chk1 antibody capable of specifically
XX binding to an antigenic determinant on the proteins encoded by a sequence
XX comprising 476 (3 sequences), 479, 496 or 513 amino acids. A new method
XX is used to produce the antibody, which is useful for detecting a Chk1
XX protein that is associated with a tumour. This sequence represents a PCR
XX primer used to isolate DNA encoding the human checkpoint protein Chk1
XX
XX Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1033 GACTTTGGCCTGGCC 1047
Db 17 GACTTTGGCCTGTCC 3
```

```
RESULT 2188
ADC37957
ID ADC37957 standard; DNA; 17 BP.
XX
XX AC ADC37957;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:306.
XX
XX human; angiominotin-like protein 1; AMLP1; cytostatic; gene therapy;
XX AMLP1a; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO2003037931-A2.
XX
XX 08-MAY-2003.
XX
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
XX Shannon M, Phan T;
XX
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiominotin-like
XX protein, useful for treating or preventing a disorder associated with
XX decreased or increased expression or activity of AMLP1.
XX
XX Example 2; SEQ ID NO 306; 172pp; English.
XX
XX The present invention describes the human angiominotin-like protein 1
XX (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene
XX therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
XX compositions of the present invention can be used for treating or
XX preventing a disorder associated with decreased or increased expression
XX or activity of AMLP1. The present sequence represents a scanning
XX oligonucleotide for human AMLP1a, which is used in an example from the
XX present invention.
XX
XX Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 856 AAGGACCTGAAGCAG 870
Db 1 AAGGAACTGAAGCAG 15
RESULT 2189
ADC37955
ID ADC37955 standard; DNA; 17 BP.
XX
XX AC ADC37955;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:304.
XX
XX human; angiominotin-like protein 1; AMLP1; cytostatic; gene therapy;
XX AMLP1a; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
```


XX WO2003037931-A2.
XX 08-MAY-2003.
XX 01-NOV-2002; 2002WO-US035129.
XX 01-NOV-2001; 2001US-0334773P.
XX (AMSH) AMERSHAM BIOSCIENCES SV CORP.
XX Shannon M, Phan T;
XX WPI; 2003-430501/40.
XX New isolated nucleic acid molecule encoding a human angiominotin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX Example 2; SEQ ID NO 304; 172pp; English.
XX The present invention describes the human angiominotin-like protein 1
CC (AMLp1). human AMLp1 has cytostatic activity, and can be used in gene
CC therapy. The AMLp1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLP1. The present sequence represents a scanning
CC oligonucleotide for human AMLP1a, which is used in an example from the
CC present invention.
XX Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 856 AAGGACCTGAAGCAG 870
Db 3 AAGGAAGCTGAAGCAG 17
RESULT 2190
ADC37956
ID ADC37956 standard; DNA; 17 BP.
AC ADC37956;
XX 18-DEC-2003 (first entry)
XX Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:305.
XX human; angiominotin-like protein 1; AMLP1; cytostatic; gene therapy;
KW AMLP1a; ss.
XX Synthetic.
OS Homo sapiens.
XX WO2003037931-A2.
XX 08-MAY-2003.
XX 01-NOV-2002; 2002WO-US035129.
XX 01-NOV-2001; 2001US-0334773P.
XX (AMSH) AMERSHAM BIOSCIENCES SV CORP.
XX Shannon M, Phan T;
XX WPI; 2003-430501/40.
XX New isolated nucleic acid molecule encoding a human angiominotin-like
PT protein, useful for treating or preventing a disorder associated with

PT decreased or increased expression or activity of AMLP1.
XX Example 2; SEQ ID NO 305; 172pp; English.
XX The present invention describes the human angiominotin-like protein 1
CC (AMLp1). human AMLp1 has cytostatic activity, and can be used in gene
CC therapy. The AMLp1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLP1. The present sequence represents a scanning
CC oligonucleotide for human AMLP1a, which is used in an example from the
CC present invention.
XX Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 856 AAGGACCTGAAGCAG 870
Db 2 AAGGAAGCTGAAGCAG 16
RESULT 2191
ADI47583
ID ADI47583 standard; DNA; 17 BP.
XX ADI47583;
AC ADI47583;
XX 15-APR-2004 (first entry)
XX Human tumour suppression/reversion-related DNA sequence SeqID86.
DE tumour suppression; tumour reversion; apoptosis; virus resistance;
XX cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW primer; PCR; gene chip; antisense; viral disease; tumour;
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX Homo sapiens.
OS WO2003025177-A2.
XX 27-MAR-2003.
PD 17-SEP-2002; 2002WO-IB004523.
XX 17-SEP-2001; 2001FR-00011980.
XX (MOLE-) MOLECULAR ENGINES LAB.
PA Telerman A, Amson R, Tuijnder M;
PI WPI; 2003-313354/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumours and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX Disclosure; SEQ ID NO 86; 30pp; French.
XX This invention relates to novel isolated nucleic acid sequences involved
CC in the phenomena of tumour suppression, tumour reversion, apoptosis
CC and/or resistance to viruses. The invention may be useful for the
CC development of compounds with a cytostatic, virucide, neuroprotective,
CC nootropic or neuroleptic activity. The DNA sequences may be useful as
CC probes and primers for detecting, identifying, quantifying and/or
CC amplifying nucleic acid, for example as one component of a gene chip, in
CC vitro as antisense reagents and for production of recombinant
CC polypeptides. The invention may therefore be useful for preparation of
CC pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration, the
CC specifically cancer but also Alzheimer's disease and schizophrenia. The


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XX OS Unidentified.
XX OS
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX DR
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
XX PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 1888; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX CC that down regulate the expression or inhibit the function of a receptor
XX CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX CC invention are useful for treating: cerebrovascular accident, central
XX CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX CC disease, lupus, multiple sclerosis, transplant/graft rejection,
XX CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX CC nucleic acids of the invention are also useful for down-regulating the
XX CC expression of a target gene and as a diagnostic tool to examine genetic
XX CC drifts and mutations within diseased cells or to detect the presence of a
XX CC target RNA in a cell. The present RNA sequence represents a human IKK-
XX CC gamma substrate sequence.
XX SQ Sequence 17 BP; 5 A; 4 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 923 TGTTCACGCTGCTCC 937
Db 17 TGCTCCAGCTGCTCC 3

RESULT 2195
ADL47582/c
ID ADL47582 standard; RNA; 17 BP.
XX AC ADL47582;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #92.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX KW substrate; ds.

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XX OS Unidentified.
XX OS
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX DR
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
XX PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 1115; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX CC that down regulate the expression or inhibit the function of a receptor
XX CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX CC invention are useful for treating: cerebrovascular accident, central
XX CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX CC disease, lupus, multiple sclerosis, transplant/graft rejection,
XX CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX CC nucleic acids of the invention are also useful for down-regulating the
XX CC expression of a target gene and as a diagnostic tool to examine genetic
XX CC drifts and mutations within diseased cells or to detect the presence of a
XX CC target RNA in a cell. The present RNA sequence represents a human IKK-
XX CC gamma substrate sequence.
XX SQ Sequence 17 BP; 1 A; 10 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 30 GCAGAGGTAGGCAGG 44
Db 16 GGAGAGGTAGGCAGG 2

RESULT 2196
ADL47973/c
ID ADL47973 standard; RNA; 17 BP.
XX AC ADL47973;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #483.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX KW substrate; ds.

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XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 1506; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX SQ Sequence 17 BP; 1 A; 10 C; 2 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 32 AGAGGTAGGCGAGG 46
Db 16 AGAGGTAGGCGAGGG 2
RESULT 2197
ADL48767/C
ID ADL48767 standard; RNA; 17 BP.
XX AC ADL48767;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #1277.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX KW substrate; ds.

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XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 2300; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTC 936
Db 15 CTGCTCCAGCTGCTC 1
RESULT 2198
ADF92273/C
ID ADF92273 standard; DNA; 17 BP.
XX AC ADF92273;
XX DT 26-FEB-2004 (first entry)
XX DE Human cyokeratin 19-derived F3 PCR primer - SEQ ID 361.
XX KW human; cyokeratin; CK; LAMP; loop mediated isothermal amplification;
XX KW tumour metastasis; prostate cancer; lymphoma; human; CK19; ss; primer;
XX KW PCR; F3.
XX OS Homo sapiens.
XX PN WO2003097878-A1.
XX PR 27-NOV-2003.
XX PD

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PF 20-MAY-2003; 2003WO-JP006256.
XX
PR 21-MAY-2002; 2002JP-00145689.
PR 17-JUN-2002; 2002JP-00175271.
PR 09-JUL-2002; 2002JP-00199759.
XX
PA (SYSM-) SYSMEX CORP.
PI Tada S, Akai Y, Imura Y, Abe S, Minekawa H;
XX WPI; 2004-012543/01.
DR
XX LAMP nucleic acid amplification primers for detection of cytokeratin
PT expression as indicator in diagnosis of tumour metastasis.
XX
PS Claim 19; SEQ ID NO 361; 266pp; Japanese.
XX
CC The invention relates to novel nucleic acid amplification primers for the
CC detection of human cytokeratin (CK) 18, 19 or 20 expression by the LAMP
CC (loop mediated isothermal amplification) method. The primers of the
CC invention may be useful for the detecting cytokeratin 18-20 expression as
CC an indicator for the diagnosis of tumour metastasis, particularly
CC prostate cancer and lymphoma. The amplification using the primers is
CC highly efficient and allows very sensitive detection of tumour
CC metastasis. The current sequence is that of the human CK19-related PCR
CC primer of the invention.
XX
SQ Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1573 TCAGGCGAGCCAGCT 1587
Db      ||||| ||||| |||||
15 TCAGTAGGCCAGCT 1

RESULT 2199
ADH70710/c
ID ADH70710 standard; DNA; 17 BP.
XX
AC ADH70710;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human Vbeta gene repeat sequence #500.
XX
KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; db.
XX
OS Homo sapiens.
XX
PN US2002150891-A1.
XX
PD 17-OCT-2002.
XX
PF 05-MAR-1999; 99US-00263959.
XX
PR 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
PA (HOOD/) HOOD L E.

PA (ROWE/) ROWEN L.
XX
PI Hood LE, Rowen L;
XX
DR WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
PS Disclosure; SEQ ID NO 904; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases,
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies. Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ Sequence 17 BP; 6 A; 11 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 231 TGGTGGTGGTGGCGG 245
Db      ||||| ||||| |||||
17 TGGTGGTGGTGGTGG 3

RESULT 2200
ADM60139/c
ID ADM60139 standard; RNA; 17 BP.
XX
AC ADM60139;
XX
DT 03-JUN-2004 (first entry)
XX
DE Hepatitis B virus (HBV) RNA target sequence #2273.
XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
OS Hepatitis B virus.
XX
PN US2004054156-A1.
XX
PD 18-MAR-2004.
XX
PF 15-JAN-2003; 2003US-00342902.
XX
PR 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.

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PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX (DRAP/) DRAPER K.
XX PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX WI WPI; 2004-247781/23.
DR Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX Disclosure; SEQ ID NO 2273; 122pp; English.
XX The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 7 A; 1 C; 5 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 532 AATAGCCCCCATCTTT 546
Db 16 AATATCCCATCTTT 2
RESULT 2201
ADM58657
ID ADM58657 standard; RNA; 17 BP.
AC ADM58657;
XX 03-JUN-2004 (first entry)
DT Hepatitis B virus (HBV) RNA target sequence #791.
DE Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX US2004054156-A1.
PN 18-MAR-2004.
XX 15-JAN-2003; 2003US-00342902.
XX 14-MAY-1992; 92US-00882712.
XX 07-FEB-1994; 94US-00193627.
XX 08-NOV-1999; 99US-00436430.
XX 20-MAR-2000; 2000US-00531025.
XX 09-AUG-2000; 2000US-00636385.
XX 24-OCT-2000; 2000US-00696347.
PR
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PR 08-JUN-2001; 2001US-00877478.
XX (DRAP/) DRAPER K.
XX PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX WI WPI; 2004-247781/23.
DR Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX Disclosure; SEQ ID NO 791; 122pp; English.
XX The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 4 A; 7 C; 2 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 1390 CTCACCAAGCTGTG 1404
Db 3 CUCACCAACCCUGUG 17
RESULT 2202
ADM60138/c
ID ADM60138 standard; RNA; 17 BP.
AC ADM60138;
XX 03-JUN-2004 (first entry)
DT Hepatitis B virus (HBV) RNA target sequence #2272.
DE Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX US2004054156-A1.
PN 18-MAR-2004.
XX 15-JAN-2003; 2003US-00342902.
XX 14-MAY-1992; 92US-00882712.
XX 07-FEB-1994; 94US-00193627.
XX 08-NOV-1999; 99US-00436430.
XX 20-MAR-2000; 2000US-00531025.
XX 09-AUG-2000; 2000US-00636385.
XX 24-OCT-2000; 2000US-00696347.
XX 08-JUN-2001; 2001US-00877478.
PR
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XX PA (DRAP/) DRAPER K.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PA (MORR/) MORRISSEY D.
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX DR WPI; 2004-247781/23.
XX XX
XX PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX PT specifically cleaving RNA derived from hepatitis B virus and comprising
XX PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX PS Disclosure; SEQ ID NO 2272; 122pp; English.
XX CC The invention relates to an enzymatic nucleic acid molecule that
XX CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX CC comprising one or more binding arms, without requiring the presence of a
XX CC 2'-OH group within the molecule for activity. The nucleic acids are
XX CC useful for treating hepatitis B virus infection, hepatitis,
XX CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX CC combination with other therapies such as lamivudine and interferons. The
XX CC nucleic acids are useful as diagnostic tools to examine genetic drift and
XX CC mutations within diseased cells, for detecting the presence of HBV RNA in
XX CC a cell, for the study of RNA and for down-regulating gene expression of
XX CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX CC sequence represents an HBV RNA target sequence, used in the scope of the
XX CC invention. Note: The sequence data for this patent is also available in
XX CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX SQ Sequence 17 BP; 8 A; 0 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 532 AATAGCCCCATCTTT 546
Db 17 AATATCCCCATCTTT 3

RESULT 2203
ADM60140/c
ID ADM60140 standard; RNA; 17 BP.
XX AC ADM60140;
XX DT 03-JUN-2004 (first entry)
XX DE Hepatitis B virus (HBV) RNA target sequence #2274.
XX KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX OS Hepatitis B virus.
XX XX
XX PN US2004054156-A1.
XX PD 18-MAR-2004.
XX PF 15-JAN-2003; 2003US-00342902.
XX PR 14-MAY-1992; 92US-00882712.
XX PR 07-FEB-1994; 94US-00193627.
XX PR 08-NOV-1999; 99US-00436430.
XX PR 20-MAR-2000; 2000US-00531025.
XX PR 09-AUG-2000; 2000US-00636385.
XX PR 24-OCT-2000; 2000US-00696347.
XX PR 08-JUN-2001; 2001US-00877478.
XX XX

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PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX DR WPI; 2004-247781/23.
XX XX
XX PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX PT specifically cleaving RNA derived from hepatitis B virus and comprising
XX PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX PS Disclosure; SEQ ID NO 2274; 122pp; English.
XX CC The invention relates to an enzymatic nucleic acid molecule that
XX CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX CC comprising one or more binding arms, without requiring the presence of a
XX CC 2'-OH group within the molecule for activity. The nucleic acids are
XX CC useful for treating hepatitis B virus infection, hepatitis,
XX CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX CC combination with other therapies such as lamivudine and interferons. The
XX CC nucleic acids are useful as diagnostic tools to examine genetic drift and
XX CC mutations within diseased cells, for detecting the presence of HBV RNA in
XX CC a cell, for the study of RNA and for down-regulating gene expression of
XX CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX CC sequence represents an HBV RNA target sequence, used in the scope of the
XX CC invention. Note: The sequence data for this patent is also available in
XX CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX SQ Sequence 17 BP; 6 A; 2 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 532 AATAGCCCCATCTTT 546
Db 15 AATATCCCCATCTTT 1

RESULT 2204
ADM59729
ID ADM59729 standard; RNA; 17 BP.
XX AC ADM59729;
XX DT 03-JUN-2004 (first entry)
XX DE Hepatitis B virus (HBV) RNA target sequence #1863.
XX KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX OS Hepatitis B virus.
XX XX
XX PN US2004054156-A1.
XX PD 18-MAR-2004.
XX PF 15-JAN-2003; 2003US-00342902.
XX PR 14-MAY-1992; 92US-00882712.
XX PR 07-FEB-1994; 94US-00193627.
XX PR 08-NOV-1999; 99US-00436430.
XX PR 20-MAR-2000; 2000US-00531025.
XX PR 09-AUG-2000; 2000US-00636385.
XX PR 24-OCT-2000; 2000US-00696347.
XX PR 08-JUN-2001; 2001US-00877478.
XX PA (DRAP/) DRAPER K.

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PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX
DR WPI; 2004-247781/23.
XX
PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 1863; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
XX specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX comprising one or more binding arms, without requiring the presence of a
XX 2'-OH group within the molecule for activity. The nucleic acids are
XX useful for treating hepatitis B virus infection, hepatitis,
XX hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX combination with other therapies such as lamivudine and interferons. The
XX nucleic acids are useful as diagnostic tools to examine genetic drift and
XX mutations within diseased cells, for detecting the presence of HBV RNA in
XX a cell, for the study of RNA and for down-regulating gene expression of
XX target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX sequence represents an HBV RNA target sequence, used in the scope of the
XX invention. Note: The sequence data for this patent is also available in
XX electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 1390 CTCACCAAGTGTG 1404
DB |:||||| |:|:|
2 CUCACCAACCGUUG 16
RESULT 2205
AD183405/C
ID AD183405 standard; RNA; 17 BP.
AC
XX
XX AD183405;
XX
DT 03-JUN-2004 (first entry)
XX
DE HCV DNzyme substrate sequence #651.
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW HCV infection; type I interferon; DNzyme.
XX
XX Hepatitis C virus.
OS
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (ROBE/) ROBERTS E.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX
XX WPI; 2004-031273/03.
XX
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (ROBE/) ROBERTS E.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX
XX WPI; 2004-031273/03.
XX
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 651; 198pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNzyme substrate
XX sequence.
XX
XX Sequence 17 BP; 3 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1434 AGAGGATGCCATGAA 1448
DB ||||| |||||
17 AGAGGATGCCATGCA 3
RESULT 2206
AD186657
ID AD186657 standard; RNA; 17 BP.
AC
XX
XX AD186657;
XX
DT 03-JUN-2004 (first entry)
XX
DE HCV DNzyme substrate sequence #3903.
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW HCV infection; type I interferon; DNzyme.
XX
XX Hepatitis C virus.
OS
XX
XX US2003125270-A1.
XX
XX 03-JUL-2003.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (ROBE/) ROBERTS E.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX
XX WPI; 2004-031273/03.
XX
XX
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX
XX Claim 1; SEQ ID NO 3903; 198pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNzyme substrate
XX sequence.
XX
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XX SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1432 GCAGAGGATGCCATG 1446
DB 2 GGAGAGGAGCCCAUG 16

RESULT 2207
ADI86658
ID ADI86658 standard; RNA; 17 BP.
XX AC ADI86658;
XX DT 03-JUN-2004 (first entry)
XX DE HCV DNase substrate sequence #3904.
XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX KW HCV infection; type I interferon; DNase.
XX OS Hepatitis C virus.
XX PN US2003125270-A1.
XX PD 03-JUL-2003.
XX PF 18-DEC-2000; 2000US-00740332.
XX PR 18-DEC-2000; 2000US-00740332.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX WPI; 2004-031273/03.
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX especially in combination with type I interferon therapy.
XX Claim 1; SEQ ID NO 3904; 198pp; English.
XX The invention relates to an enzymatic nucleic acid molecule which
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX the binding arms of the enzymatic nucleic acid molecule comprises
XX sequences complementary to any of the defined substrate sequences given
XX in the specification. The nucleic acid molecule may be administered for
XX the treatment of HCV infections, especially in combination with type I
XX interferons. The present sequence represents a HCV DNase substrate
XX sequence.
XX SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1434 AGAGATGCCATGAA 1448
DB 2 AGAGGAGGCCAUGCA 16

RESULT 2208
AAT50714
XX SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 60.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCC 1042
DB 3 UGGCUGACUUGUCC 17

10017621-3sl.rng
AAT50714 standard; RNA; 18 BP.
AAT50714;
07-MAR-1997 (first entry)
Rabbit CETP hairpin ribozyme target sequence #588.
Hairpin ribozyme; cholesterol ester transfer protein; mRNA cleavage;
neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
reverse cholesterol transport; high density lipoprotein; therapy; CETP;
familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
LDL; ss.
Oryctolagus cuniculus.
WO9620279-A1.
04-JUL-1996.
11-DEC-1995; 95WO-US016000.
23-DEC-1994; 94US-00363240.
(RIBO-) RIBOZYME PHARM INC.
(WARN) WARNER LAMBERT CO.
Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Page M;
WPI; 1996-321852/32.
New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
useful for preventing or treating initial development, progression or
regression of vascular diseases, esp. familial hypercholesterolaemia.
Claim 4; Page 55; 72pp; English.
AAT50699-T50754 represent target sequences for the rabbit cholesterol
ester transfer protein (CETP) hairpin ribozymes (see AAT50643-T50698).
CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer
between plasma lipoproteins. The numbering of the targets refers to the
position of the cleavage site in full length CETP. The ribozyme then
binds to 4-6 nucleotides 5', and a variable number 3' of this site. The
ribozymes are able to cleave mRNA from the gene encoding CETP, thereby
blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the
reverse cholesterol transport (RCT) pathway can be inhibited (or
eliminated) thereby preventing the reduction in size density of the high
density lipoproteins (HDL), prolonging HDL half life, and therefore
increasing HDL levels. The ribozymes can be used to treat conditions
associated with abnormal levels of CETP, specifically atherosclerosis,
peripheral vascular disease, hyperbetalipoproteinaemia, dyslipidaemia,
familial hypercholesterolaemia, hypoalphalipoproteinaemia, vascular
complications of diabetes, transplant, atherectomy and angioplastic
restenosis. By inhibiting CETP, the levels of HDL and low density
lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
decrease in LDL levels, and a corresponding increase in HDL levels). The
ribozymes can also be used diagnostically to study genetic drift and
mutations in diseased cells, and to detect CETP mRNA. As the ribozymes
target specific regions of the CETP gene, they have low non-specific
activity
XX SQ Sequence 18 BP; 3 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 60.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCC 1042
DB 3 UGGCUGACUUGUCC 17

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Tue Nov 2 13:39:09 2004

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RESULT 2209
AAV12786/c
ID AAV12786 standard; DNA; 18 BP.
XX
AC AAV12786;
XX
DT 03-JUN-1998 (first entry)
XX
DE Patient-specific CDR2/CDR3 5' PCR primer LAR1 CDR3.
XX
KW Rearrangement; gene; immunoglobulin H; IGH; T cell receptor; TCR;
KW clonotypic rearrangement; haematopoietic cell; monitor; response;
KW haematological cancer; multiple myeloma; Hodgkin's disease;
KW acute lymphoblastic leukaemia; test; bone marrow; autologous transplant;
KW detection; clonotypic cell; premalignant; autoimmune; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9746706-A1.
XX
PD 11-DEC-1997.
XX
PF 03-JUN-1997; 97WO-US009534.
XX
PR 03-JUN-1996; 96US-0019106P.
XX
PA (UYAI-) UNIV ALBERTA.
XX
PI Pilarski LM, Belch AR, Szczepek AJ;
XX
WPI; 1998-042212/04.
XX
PT Detecting specific clonotypic nucleic acid rearrangement in
PT haematopoietic cells - used to monitor treatment of haematological cancer
PT or to screen bone marrow transplants.
XX
XX Example 1; Page 43; 74pp; English.
XX
CC PCR primers AAV12776-86 are used for PCR, in situ reverse transcription
CC PCR (RT-PCR) and RT-PCR. The rearrangement of immunoglobulin (Ig) H genes
CC or the rearrangement of T cell receptor (TCR) genes in a clone is called
CC its "clonotypic rearrangement". The primers are used to identify
CC clonotypic nucleic acid rearrangements in haematopoietic cells from a
CC patient with (or at risk of) a haematological neoplastic disease. A novel
CC method is described to detect such clonotypic rearrangements. This method
CC comprises isolating a neoplastic haematopoietic cell containing a target
CC clonotypic rearrangement and amplifying a specific segment of the target.
CC The amplified product is sequenced to determine if the clonotypic
CC rearrangement is present. The method is especially used to monitor a
CC patients' response to treatment of haematological cancer (e.g. multiple
CC myeloma, Hodgkin's disease or acute lymphoblastic leukaemia). The method
CC can also be used to test bone marrow samples, including stem cells,
CC intended for autologous transplant. Other applications include detecting
CC clonotypic cells in premalignant and autoimmune states, identifying cell
CC types representative of the different stages in a malignant clone and
CC development of therapies
XX
SQ Sequence 18 BP; 2 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 363 CCACGCTCTCGGATG 397
DB 16 CCACGCTCTCGGAGG 2
RESULT 2210
AAV73903/c
ID AAV73903 standard; DNA; 18 BP.
XX
AC AAV73903;
XX
DT 02-MAR-1999 (first entry)
XX
DE Human HLA-A2 A*0201 allele antisense PCR primer AL#U.
XX
KW HLA-A2; allele; A*0201; PCR primer; polymorphic loci; subtyping;
KW human leucocyte antigen; therapy; bone marrow transplant; vaccine;
KW gene therapy; tumour cell; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN DE19715430-A1.
XX
PD 26-NOV-1998.
XX
PF 14-APR-1997; 97DE-01015430.
XX
PR 14-APR-1997; 97DE-01015430.
XX
PA (BOEF ) BOEHRINGER MANNHEIM GMBH.
XX
PI Schendel D, Gatz S;
XX
WPI; 1999-010501/02.
XX
PT Sub-typing complex polymorphic gene loci by amplification of multiple
PT alleles - with individual alleles detected from combination of amplicons
PT formed, specifically for typing HLA-A2 before bone marrow transplants or
PT vaccination.
XX
XX Claim 8; Page 11; 18pp; German.
XX
CC AAV73887-V73911 are PCR primers used in a method for subtyping complex
CC polymorphic loci in a DNA-containing sample, in which individual alleles
CC are detected by multiple nucleic acid amplifications, a particular allele
CC is identified from the combination of amplifications that produce
CC amplicons from alleles present in the sample. The method is especially
CC used to subtype the human leucocyte antigen (HLA)-A locus, particularly
CC A2 and specifically to detect the A*0201 allele. The method is applied
CC before therapy, e.g. for subtyping bone marrow transplants, gene therapy
CC vaccines, tumour cell vaccines, MHC carrier or peptide vaccines. The use
CC of polymerase chain reaction (PCR) with sequence-specific primers to
CC identify the most important alleles first (so that only rarer alleles
CC require additional tests) reduces the number of experiments needed for
CC subtyping. To identify an allele, a PCR reaction must occur, i.e. any
CC negative result must be the result of experimental error and will not
CC result in an incorrect subtype
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 505 GAGGCTACCTGGAG 519
DB 15 GAGGCTACCTGGAG 1
RESULT 2211
AAV88679
ID AAV88679 standard; DNA; 18 BP.
XX
AC AAV88679;
XX
DT 10-SEP-1999 (first entry)
XX
DE Human chromosome 18q YAC clone primer.
XX
KW Human chromosome 18q; mood disorder; polymorphic marker; detection;

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CC Primers AAX79310-X79315 were used to PCR amplify the human serotonin
 CC receptor splice variants 5-HT-4(c) (AAX79306) and 5-HT-4(d) (AAX79307). 5
 CC -HT4(c) and 5-HT4(d) receptor polypeptides can be used to screen for
 CC substances, especially ligands, useful in the treatment of CNS disorders
 CC associated with abnormal 5-HT4(c) receptor expression or gastrointestinal
 CC disorders associated with abnormal 5-HT4(d) receptor expression
 XX
 SQ Sequence 18 BP; 7 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGAGCTCAAA 780
 ||||| |||||
 Db 1 CTCAGGAGCTCAAA 15

RESULT 2214
 AAZ74421
 ID AAZ74421 standard; DNA; 18 BP.
 AC AAZ74421;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:8777.
 DE
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO954500-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 PA (GEST) GENSET.
 XX

PI Cohen D, Blumenfeld M, Chumakov I;
 DR WPI; 2000-013267/01.
 XX
 XX Novel biallelic markers used to construct a high density disequilibrium
 XX map of the human genome.
 PT
 XX
 PS Claim 8; Page 2102; 2745pp; English.

AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 SQ Sequence 18 BP; 6 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1673 CAGCCCCCAACTACA 1687
 ||||| |||||
 Db 3 CAGCCCTCAACTACA 17

RESULT 2215
 AAH40049/c
 ID AAH40049 standard; DNA; 18 BP.
 XX
 AC AAH40049;
 XX
 DT 14-AUG-2001 (first entry)
 XX
 DE SNP specific upper PCR primer SEQ ID 2845.

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
 KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
 KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
 KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
 KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200123262-A2.
 XX
 PD 26-APR-2001.
 XX
 PF 13-OCT-2000; 2000WO-US028436.
 XX
 PR 15-OCT-1999; 99US-0160096P.
 XX
 PA (ORCH-) ORCHID BIOSCIENCES INC.
 XX
 PI Picoult-Newburg L, Pohl M;
 DR WPI; 2001-290930/30.
 XX
 XX New genotyping oligonucleotide, useful for detecting the presence,
 PT absence or identity of single polynucleotide polymorphism in a nucleic
 PT acid sample.
 XX

Claim 1; Page 64; 83pp; English.

Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
 CC primer extension (SNPE) primers, and the sequences of regions flanking
 CC sites of single nucleotide polymorphisms SNPs. The present invention
 CC includes kits for determining the presence or absence of a SNP, using the
 CC oligonucleotides of the invention. The PCR primers are used to amplify a
 CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
 CC The oligonucleotides are useful for genotyping a nucleic acid sample by
 CC performing a single-nucleotide primer extension reaction. The
 CC oligonucleotides are useful for determining the presence, absence or
 CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
 CC assess by association analysis the genotype of an individual or group of
 CC individuals, having a pathological phenotypic trait suspected of being
 CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
 CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
 CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
 CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
 CC traits also include symptoms of or susceptibility to multifactorial
 CC disease of which a component is or may be genetic such as autoimmune
 CC diseases, including, rheumatoid arthritis, multiple sclerosis,
 CC inflammation, cancer, nervous system diseases and infection by pathogenic
 CC microorganism. The method is also useful in forensic investigations and
 CC paternity analysis. The present sequence represents a PCR primer specific
 CC for a human SNP containing DNA sequence

SQ Sequence 18 BP; 4 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 274 GCTGCTCTGGGAA 288
||||| |||||

DB 18 GCTGCTCTGGGAA 4

RESULT 2216
ABK52758/c
ID ABK52758 standard; DNA; 18 BP.

XX AC ABK52758;

XX DT 27-AUG-2002 (first entry)

XX DE Nuclease resistant oligonucleotide.

XX KW Nuclease resistant oligonucleotide; phosphinoamidite carboxylate;
KW antiviral; anticancer; human T-lymphotropic virus; HTLV-I; HTLV-II;
KW human immunodeficiency virus; HTLV-III; AIDS; HIV; influenza; mumps;
KW measles; rhinovirus; dengue; rubella; rabies; hepatitis virus A;
KW encephalitis virus; herpes virus; varicella-zoster virus; vaccinia;
KW Epstein-Barr virus; human cytomegalovirus; papilloma virus; leukaemia;
KW carcinoma; sarcoma; melanoma; carcinosarcoma; cell sarcoma;
KW Hodgkins disease; acquired immune deficiency syndrome; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..18
FT /*tag= a
FT /note= OTHER
FT /note= "Optionally, phosphonoacetate,
FT phosphonoethioacetate, phosphorothioate or phosphodiester
FT internucleotide linkages"

XX PN WO200232912-A2.

XX PD 25-APR-2002.

XX PF 16-OCT-2001; 2001WO-US032465.

XX PR 17-OCT-2000; 2000US-00691824.

XX PA (DELL/) DELLINGER D J.

XX PT Dellinger DJ;

XX WPI; 2002-463302/49.

XX PT New phosphinoamidite carboxylate derivatives useful in synthesis of
XX oligonucleotides and for treating e.g. cancer and HIV.

XX PS Example 38; Page 68; 104pp; English.

XX CC The invention relates to new phosphinoamidite carboxylate derivatives
XX (I). (I) are used for the synthesis of oligonucleotides. (I) are also
XX used as antiviral or anticancer agents for the treatment of HTLV-I, HTLV-
XX II, human immunodeficiency viruses, HTLV-III (AIDS virus), influenza type
XX A, B and C, mumps, measles, rhinovirus, dengue, rubella, rabies,
XX hepatitis virus A, encephalitis virus, herpes viruses (e.g. herpes
XX simplex virus-1, herpes simplex virus-2, varicella-zoster virus, Epstein-
XX Barr virus, human cytomegalovirus, human herpes virus 6, human herpes
XX virus 7 and human herpes virus 8), vaccinia, papilloma virus, hepatitis
XX virus B, leukaemias (e.g. acute lymphoblastic chronic lymphocytic, acute
XX myeloblastic and chronic myelocytic leukemias), carcinoma (e.g. cervix,
XX oesophagus, stomach, small intestines, colon and lungs), sarcomas (e.g.
XX osteosarcoma, leiomyoma, liposarcoma, hemangioma and
XX hemangioendothelioma), melanomas (e.g. amelanotic and melanotic),

CC carcinosarcoma, lymphoid tissue type, follicular reticulum, cell sarcoma
CC and Hodgkins disease. The synthesised oligonucleotide has reduced
CC internucleotide charge and improved nuclease resistance. Synthesis of
CC oligonucleotides is effected in high yielding coupling reactions at the
CC phosphorous group as well as high yielding reactions at the carboxylate
CC group, with the phosphorous-carboxylate group left intact. The present
CC sequence represents a nuclease resistant oligonucleotide of the invention

XX SQ Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1728 TCACCTGCCCACTTG 1742
||||| |||||

DB 17 TCACCAAGCCCACTTG 3

RESULT 2217
ABL44832/c
ID ABL44832 standard; DNA; 18 BP.

XX AC ABL44832;

XX DT 11-APR-2002 (first entry)

XX DE Human chromosome lp36-35 PCR primer SEQ ID NO:1876.

XX KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.

XX OS Homo sapiens.

XX PN JP2001321190-A.

XX PD 20-NOV-2001.

XX PF 12-MAR-2001; 2001JP-00068285.

XX PR 10-MAR-2000; 2000JP-00066716.

XX PA (RIKA) RIKAGAKU KENKYUSHO.

XX PA (GENO-) GENOTEX YG.

XX DR WPI; 2002-144136/19.

XX PT Arraying genome clones.

XX PS Claim 4; Page 41; 528pp; Japanese.

XX CC The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multiwell plates numbered for discrimination are mixed in each of the
XX multiwell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multiwell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multiwell
XX plates; (e) the clones in the multiwell plates of the specified
XX discrimination Nos. are mixed respectively in each wells of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multiwell
XX plates are specified from the detected result; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention

| | | | |
|----|-----------------------|--|---------------|
| XX | DT | 13-DEC-2002 | (first entry) |
| XX | PC | PCR primer #3 designed to bind human MMP PPR region. | |
| XX | DE | Sequential consensus region-directed amplification; gene expression; | |
| XX | KW | disease diagnosis; gene analysis; human; matrix metalloproteinase; MMP; | |
| XX | KW | propeptide region; PPR; PCR; primer; ss. | |
| XX | OS | Homo sapiens. | |
| XX | PX | US6277571-B1. | |
| XX | PX | 21-AUG-2001. | |
| XX | PF | 30-SEP-1998; 98US-00163485. | |
| XX | PX | 03-OCT-1997; 97US-00943162. | |
| XX | PX | 03-OCT-1997; 97US-0108152P. | |
| XX | PA | (UUVI-) UNIV VIRGINIA COMMONWEALTH INTELLECTUAL. | |
| XX | PX | Fillmore H, Broadus W, Gillies G; | |
| XX | DR | WPI; 2002-412824/44. | |
| XX | PT | Sequential consensus region-directed amplification for sorting mixture of | |
| XX | PT | DNA's into 2 or more subsets or distinguishing gene expression patterns in | |
| XX | PS | 2 samples, useful for disease diagnosis and gene analysis. | |
| XX | PS | Example; Col 12; 19pp; English. | |
| XX | CC | The invention relates to a method of sequential consensus region-directed | |
| XX | CC | amplification for sorting a mixture of DNAs into 2 or more subsets or | |
| XX | CC | distinguishing gene expression patterns in 2 samples. The methods, kits | |
| XX | CC | and oligonucleotides are useful for sorting a mixture of DNAs into 2 or | |
| XX | CC | more subsets or distinguishing gene expression patterns in 2 samples e.g. | |
| XX | CC | for disease diagnosis and gene analysis. The present sequence is a PCR | |
| XX | CC | primer designed to bind to human matrix metalloproteinase (MMP) | |
| XX | CC | propeptide region (PPR). This primer is used to illustrate the method of | |
| XX | CC | the invention | |
| XX | SQ | Sequence 18 BP; 6 A; 2 C; 5 G; 3 T; 0 U; 2 Other; | |
| | Query Match | 0.8%; Score 13.4; DB 1; Length 18; | |
| | Best Local Similarity | 77.8%; Pred. No. 1.1e+03; | |
| | Matches | 14; Conservative 1; Mismatches 3; Indels 0; Gaps 0 | |
| OY | 856 | AAGGACCTGAAGCAGTAC 873 | |
| Db | 1 | AAGGAYGTNAGCAGTTC 18 | |
| | RESULT 2220 | | |
| | ABX03808/c | | |
| ID | ABX03808 | standard; cDNA; 18 BP. | |
| XX | AC | ABX03808; | |
| XX | AC | ABX03808; | |
| XX | DT | 09-JAN-2003 (first entry) | |
| XX | DE | DNA encoding secreted protein signal peptide sequence #17. | |
| XX | KW | Differential display method; leucine-rich motif; transmembrane protein; | |
| XX | KW | secreted protein; secreted protein signal peptide; ss. | |
| XX | OS | Unidentified. | |
| XX | PX | WO200259259-A2. | |
| XX | PX | 01-AUG-2002. | |
| XX | PF | 23-JAN-2002; 2002WO-IL0000071. | |

XX PR 23-JAN-2001; 2001US-0263158P.
 XX PA (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.
 XX PI Wreschner DH;
 XX DR WPI; 2002-599769/64.
 XX DR P-PSDB; ABG98337.
 XX PT Differential display method for identifying secreted or transmembrane
 PT protein, comprises contacting a DNA with a first primer that hybridizes
 PT to a sequence coding for a leucine-rich motif and with a second
 PT oligonucleotide primer.
 XX PS Disclosure; Fig 2; 37pp; English.
 XX CC The invention relates to a differential display comprising contacting
 CC cDNA with a first primer that hybridizes to an oligonucleotide sequence
 CC coding for a leucine-rich motif, and with a second oligonucleotide primer
 CC to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from
 CC at least 2 samples, synthesizing cDNA from the RNA of each sample,
 CC contacting the cDNA with a first primer that hybridizes to an
 CC oligonucleotide sequence coding for a leucine-rich motif, and with a second
 CC oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA
 CC -hybrid molecules, detecting amplified products and comparing the
 CC amplified products from each sample to identify distinctive amplified
 CC products coding for at least one secreted or transmembrane protein. The
 CC method is useful for discovering novel secreted and/or transmembrane
 CC proteins which are important for cell processes and play an important
 CC role in determining its phenotype, and which act as mediators for the
 CC transfer of signals from external environment into the cell itself, thus
 CC modulating gene expression. Sequences ABX03792-ABX03869 represent DNA
 CC encoding secreted protein signal peptide sequences
 XX SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 38 AGGCAGGAGGACCAG 52
 Db |||||||||
 18 AGTCAGGAGGACCAG 4
 RESULT 2221
 AAD52481
 ID AAD52481 standard; DNA; 18 BP.
 XX AC AAD52481;
 XX DT 02-MAY-2003 (first entry)
 XX DE Lolium perenne LpPKABAB cDNA sequencing forward primer 2.
 XX KW Abscisic acid-inducible and stress responsive protein; ASR; A22; PKABA;
 KW stress-inducible cysteine protease; late embryogenesis abundant protein;
 KW LEA; dehydrin; DHN; abscisic acid-induced protein kinase; gene therapy;
 KW CYS; seed development; plant tolerance; germination; plant protectant;
 KW ryegrass; primer; ss.
 XX OS Lolium perenne.
 XX PN WO200290547-A1.
 XX PD 14-NOV-2002.
 XX PF 07-MAY-2002; 2002WO-AU0000564.
 XX PR 07-MAY-2001; 2001AU-00004821.
 XX PA (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.

PA (AGRE-) AGRESEARCH LTD.
 XX SPangenberg G, Sawbridge TI, Ong EK, Emmerling M;
 XX WPI; 2003-129183/12.
 XX DR New isolated nucleic acid encoding ASR, A22, CYS, LEA, DHN or PKABA
 PT proteins, useful as molecular genetic markers, and in modifying plant
 PT and/or seed development and responses to stresses and adverse
 PT environmental stimuli.
 XX Example 3; Page 29; 231pp; English.
 XX CC The invention relates to nucleic acid encoding abscisic acid-inducible
 CC and stress responsive proteins (ASR and A22), stress-inducible cysteine
 CC proteases (CYS), late embryogenesis abundant proteins (LEA), dehydrins
 CC (DHN) and abscisic acid-induced protein kinases (PKABA). The invention
 CC also relates to a method for modification of plant and seed development
 CC and plant responses to stresses and stimuli. The invention is useful as
 CC molecular genetic markers. The method is useful for modifying plant
 CC response to an environmental stimulus, modifying plant tolerance to
 CC abiotic, osmotic and/or temperature stresses, modifying seed dormancy
 CC and/or germination, development, maturation, and modifying a plant
 CC developmental process. They are also useful for modifying plant tolerance
 CC and adaptation to stresses and adverse environmental stimuli. The
 CC invention is also used in gene therapy. The present sequence is a primer
 CC used for sequencing Lolium perenne LpPKABAB cDNA
 XX SQ Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1577 GCAGCCGAGCTTTC 1591
 Db |||||||||
 4 GCAGGCGAGCTTTC 18
 RESULT 2222
 ABV77210
 ID ABV77210 standard; DNA; 18 BP.
 XX AC ABV77210;
 XX DT 28-MAR-2003 (first entry)
 XX DE PCR primer used to amplify consensus region A of hDOR cDNA.
 XX KW Delta-opioid receptor; hDOR; G-protein coupled receptor; GPCR array;
 KW ion-related disease; asthma; diabetes; AIDS; allergy; dermatitis;
 KW psoriasis; Alzheimer's disease; Parkinson's disease; arthritis; GPCR;
 KW depression; narcolepsy; infection; transplant rejection; lupus;
 KW hepatitis; autism; cancer; renal disorders; PCR; primer; ss.
 XX OS Homo sapiens.
 XX PN WO200295065-A2.
 XX PD 28-NOV-2002.
 XX PF 21-MAY-2002; 2002WO-DK000337.
 XX PR 18-MAY-2001; 2001DK-00000802.
 XX PA (AZIG-) AZIG BIOSCIENCE AS.
 XX PI Thirstrup K, Madsen LS, Jensen JB, Hummel R, Jensen BS;
 XX WPI; 2003-129439/12.
 XX PT New G-protein coupled receptor array comprising individual polynucleotide
 PT spots stably associated with a surface and a solid support useful for

PT determining the pathogenesis of different ion-related conditions or
PT diseases in humans.
XX
XX
XX Example 2; Page 30; 43pp; English.
XX
XX PCR primers ABV77210-11 were used to amplify a consensus region of the
CC human delta-opioid receptor (hDOR). This opioid receptor belongs to the G
CC -protein coupled receptor (GPCR) family. The amplified fragment was used
CC to produce a GPCR array of the invention. The specification describes a
CC GPCR array comprising a multiplicity of individual polynucleotide spots
CC stably associated with a surface and a solid support. The individual GPCR
CC polynucleotide spot comprises a GPCR polynucleotide composition
CC consisting of a non-conserved region of a GPCR polynucleotide family member,
CC where the spots represent at least two different regions of a GPCR
CC polynucleotide family member. The GPCR array is useful for determining
CC the pathogenesis of different ion-related conditions or diseases in
CC humans, e.g. asthma, diabetes, AIDS, allergies, dermatitis, psoriasis,
CC Alzheimer's disease, Parkinson's disease, arthritis, depression,
CC narcolepsy, viral or parasitic infections, transplant rejection, lupus,
CC hepatitis, autism, cancer, renal disorders, etc
XX
XX Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1099 TGGTACCGGCCCT 1113
DB 2 TGGAACCGGCCCT 16
||| ||||| |||||
||| ||||| |||||

RESULT 2223
ADM92708/c
ID ADM92708 standard; DNA; 18 BP.
XX
XX ADM92708;
AC
XX
XX 03-JUN-2004 (first entry)
XX
XX SNP-containing cardiovascular associated gene primer #38.
XX
XX SNP; single nucleotide polymorphism; cardiovascular associated gene;
XX allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
XX restenosis; arterial inflammation; myocardial infarction; stroke; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX WO2003057911-A2.
XX
XX 17-JUL-2003.
XX
XX 07-JAN-2003; 2003WO-EP0000060.
XX
XX 08-JAN-2002; 2002EP-00000153.
XX
XX (FARB) BAYER AG.
XX
XX Stropp U, Schwars S, Kallabis H;
XX
XX WPI; 2003-577532/54.
XX
XX New isolated polynucleotides comprising single nucleotide polymorphisms
PT of the cardiovascular gene, useful for assessing predisposition or
PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,
PT restenosis or stroke.
XX
XX Disclosure; Page 67; 187pp; English.
XX
XX The invention relates an isolated polynucleotide (I) encoded by a
CC cardiovascular associated (CA) gene, having allelic variation contained
CC in a functional surrounding like full length cDNA for CA gene

CC polypeptide, and with or without the CA gene promoter sequence. (I) is a
CC polynucleotide comprising single nucleotide polymorphisms predicting
CC cardiovascular disease. The polynucleotides are useful for assessing
CC predisposition or susceptibility to a cardiovascular disease, e.g.
CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
CC inflammation, myocardial infarction, and stroke. These may also be used
CC to predict personal medication schemes omitting adverse drug reactions,
CC or as probes for detecting genetic polymorphisms and as templates for the
CC recombinant production of normal or variant peptides/polypeptides encoded
CC by the genes. This sequence corresponds to a PCR primer to amplify one of
XX the genes of the invention.
XX
XX Sequence 18 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1025 AGCTGGCTGACTTTG 1039
DB 18 AGATGGCTGACTTTG 4
||| ||||| |||||
||| ||||| |||||

RESULT 2224
ADF77896
ID ADF77896 standard; DNA; 18 BP.
XX
XX ADF77896;
AC
XX
XX 26-FEB-2004 (first entry)
XX
XX Human EST clone antisense oligonucleotide #24.
XX
XX reporter construct; reporter element; effective analysis;
XX high-throughput; microtitre well format; light emission;
XX primary cell screening; low level mRNA expression; ss; human; antisense;
XX EST; expressed sequence tag.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX US2003124523-A1.
XX
XX 03-JUL-2003.
XX
XX 18-JUN-2001; 2001US-00883573.
XX
XX 22-JUN-2000; 2000US-0213132P.
XX
XX 07-FEB-2001; 2001US-0266949P.
XX
XX (ASSE/) ASSELBERGS F A M.
XX (HALL/) HALL J.
XX (HUES/) HUESKEN D.
XX (KINZ/) KINZEL B.
XX (NATT/) NATT F.
XX (WEIL/) WEILLER J.
XX
XX Aselbergs FAM, Hall J, Huesken D, Kinzel B, Natt F, Weiller J;
XX
XX WPI; 2004-009138/01.
XX
XX Reporter construct, useful for identifying potential therapeutic oligo-
XX or poly-nucleotides, comprises target nucleic acid inserted 3' to a
XX reporter element.
XX
XX Example 4; Page 7; 22pp; English.
XX
XX The invention relates to a reporter construct (RC) comprises a reporter
XX element (RE) and a target nucleic acid, inserted 3' to RE, in the
XX untranslated region. RC are used to identify, particularly in screening
XX assays, oligo- or poly-nucleotides that modulate expression of a target
XX sequence, particularly antisense sequences and ribozymes, potentially
XX useful as pharmaceuticals. RC provide (a) effective analysis of

CC biological activity of many test sequences against specific targets; (b)
 CC monitoring of mRNA levels without the cost and extensive pipetting
 CC required in reverse transcription PCR; and (c) use of high-throughput,
 CC microtitre well formats for screening, with the reaction (light emission)
 CC read directly from the wells, with exactly the same conditions for each
 CC well (no need for a set of probes as in e.g. the Taqman assay). The
 CC method is especially useful for screening primary cells (or other cells
 CC that are difficult to obtain) or where target mRNA is expressed at very
 CC low levels. The present sequence is used in the exemplification of the
 CC present invention.

XX Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1.1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 988 CCCGAGACCTGCTC 1002
 |||||
 Db 2 CCCCTGAACCTGCTC 16

RESULT 2225

AAQ31195
 ID AAQ31195 standard; DNA; 19 BP.

XX AAQ31195;

XX 25-MAR-2003 (revised)

DT 23-MAR-1993 (first entry)

XX

DE Alpha 6A integrin primer 1681.

XX

KW Human; alpha 6A; integrin; cell surface receptor; adhesion;
 KW extracellular matrix; cytoskeleton; heterodimer; laminin receptor;
 KW alpha 3A; polymerase chain reaction; PCR; amplify; hamster; ss.

XX Synthetic.

XX

PN WO9219647-A1.

XX

PD 12-NOV-1992.

XX

PF 27-APR-1992; 92WO-US003527.

XX

PR 03-MAY-1991; 91US-00695564.

XX

PA (SCEI) SCRIPPS RES INST.

XX

PI Tamura RN, Quaranta V;

XX

DR WPI; 1992-398799/48.

XX

PT Integrin alpha sub-unit cytoplasmic domain polypeptide(s) - used for
 PT prodn. of antibodies and in detection of integrin sub-units in body
 PT samples.

XX

PS Disclosure; Page 95; 115pp; English.

XX

CC The sequences given in AAQ31193-98 are primers which were used to amplify
 CC the coding sequences for the human alpha 6A and the hamster alpha 3A
 CC integrin subunits. Integrins are a family of cell surface receptors which
 CC serve cellular adhesion functions. These receptors form a link between
 CC the extracellular matrix and the cytoskeleton through their binding to
 CC various extracellular components. Each integrin receptor is a heterodimer
 CC comprised of an alpha and a beta subunit. Each alpha subunit tends to
 CC associate with only one type of beta subunit but there are several
 CC exceptions to this rule. The 6A and 6B integrin subunits correspond to
 CC the laminin receptor. The cytoplasmic domain of the 6A and 6B integrins
 CC differs from previously isolated alpha 6 integrins. (Updated on 25-MAR-
 CC 2003 to correct PN field.)

XX Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 881 ACTGTGGGAACATCA 895

|||||
 Db 3 ACTGTGTGAACATCA 17

RESULT 2226

AAV30804

ID AAV30804 standard; DNA; 19 BP.

XX

AC AAV30804;

XX

DT 25-MAR-2003 (revised)

DT

14-SEP-1998 (first entry)

XX

DE Human prohibitin gene 3' UTR primer p3'.

XX

KW Breast cancer; diagnosis; prognosis; assay; prohibitin gene;
 KW polymorphism; RFLP; human; PCR; primer; ss.

XX

OS Synthetic.

OS

XX Homo sapiens.

XX

PN WO9820167-A1.

XX

PD 14-MAY-1998.

XX

PF 06-NOV-1997; 97WO-US020844.

XX

PR 07-NOV-1996; 96US-0029978P.

XX

PA (OKLA-) OKLAHOMA MEDICAL RES FOUND.

XX

PI Jupe ER, Thompson LF, Resta R, Delloirco RT;

XX

DR WPI; 1998-286976/25.

XX

PT Determining risk of hereditary breast cancer - by determining the base
 PT identity at position 729 of the 3' untranslated region of the prohibitin
 PT gene.

XX

PS Disclosure; Page 36; 55pp; English.

XX

CC Sense primer p3' corresponds to nucleotides 768-786 of the 5'-3' sense
 CC strand of a 1328 bp human prohibitin gene fragment (see AAV30803),
 CC extending from intron 6 to the 3' untranslated region (3'UTR). It was
 CC used with primer P4' (see AAV30805) to generate a 442 bp nucleic acid
 CC fragment that lies immediately 5' to the polymorphic AflIII cut site in
 CC the 3'UTR. This was used as a probe in Southern blotting experiments. A
 CC germline polymorphism at position 729 in the prohibitin gene 3'UTR (see
 CC also AAV30797) is a susceptibility marker for breast cancer. Homozygous
 CC T/T at this position carries the greatest lifetime risk, heterozygous C/T
 CC carries intermediate risk, and homozygous C/C the lowest risk. The
 CC substitution of a T for C at position 729 results in loss of cleavability
 CC by AflIII. RFLP analysis allows the risk of hereditary breast cancer to
 CC be determined in both women and men. (Updated on 25-MAR-2003 to correct
 CC PI field.)

XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 13.4; DB 1; Length 19;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 566 GCCTCCGCTGCTGCA 580

|||||

Db 2 GCCTCCGCTGCTGCA 16

```

RESULT 2227
AAZ20455
ID AAZ20455 standard; DNA; 19 BP.
XX
AC AAZ20455;
XX
DT 19-NOV-1999 (first entry)
XX
DE PCR primer Bmag5Rev for microsatellite marker clone Bmag5.
XX
KW PCR primer; microsatellite marker; barley; chromosome 7 marker; cereal;
KW fermentability; group 5 chromosome; ethyl carbanate production; Bmac213;
KW wort fermentation; Triticaceae; Bmac96; epi-heterodendrin production;
KW diagnosis; ss.
XX
OS Synthetic.
OS Hordeum vulgare.
XX
XX WO9946404-A1.
XX
XX 16-SEP-1999.
XX
XX 01-MAR-1999; 99WO-GB000602.
XX
XX 10-MAR-1998; 98GB-00005087.
XX
XX (SCCR-) SCOTTISH CROP RES INST.
XX
XX Thomas WTB, Swanson JS, Powell W, Waugh R, Ramsey LD;
XX
XX WPI; 1999-551424/46.
XX
XX Screening cereals for fermentability, especially useful in barley.
XX
XX Claim 20; Page 23; 49pp; English.
XX
XX This sequence represents a PCR primer for a barley chromosome 7
XX microsatellite marker, and can be used in the method of the invention.
XX The method is for screening cereal for fermentability, comprising
XX analysing cereal genomic DNA to determine which allele(s) of a gene/gene
XX complex affecting fermentability at a locus close to the centromere on
XX homologous Triticaceae group 5 chromosome (barley chromosome 7) is/are
XX present. The invention also relates to a method for screening cereal for
XX ethyl carbanate production on wort fermentation and distillation,
XX comprising analysing barley genomic DNA to determine which allele(s) of
XX the locus, designated eph on the short arm of homologous Triticaceae group
XX 1 chromosome (barley chromosome 5) is/are present. The methods and
XX primers are useful for identifying microsatellites Bmac96 and Bmac213,
XX which are useful for determining fermentability and/or epi-heterodendrin
XX production in cereals, especially barley. Current methods for determining
XX fermentability are difficult to apply within barley breeding programs.
XX Prior art methods using molecular markers have difficulty in detecting
XX levels of allelic variation
XX
XX Sequence 19 BP; 8 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1060 ATCCCAACAAGACA 1074
DB 4 ATCCCAACAAGACA 18
XX
RESULT 2228
AAZ59837
ID AAZ59837 standard; DNA; 19 BP.
XX
AC AAZ59837;
XX
DT 28-JUL-1999 (first entry)
XX
DE PCR primer used to amplify a fragment of the prohibitin gene.

```

```

RESULT 2227
AAZ31877
ID AAZ31877 standard; DNA; 19 BP.
XX
AC AAZ31877;
XX
DT 11-JUN-1999 (first entry)
XX
DE S. aureus polypeptide encoding DNA amplifying primer.
XX
KW Staphylococcus aureus polypeptide; thyroiditis; infective carditis;
KW lung abscess; secretory diarrhoea; cerebral abscess; conjunctivitis;
KW toxic shock syndrome; folliculitis; septic arthritis; antibacterial;
KW H. pylori infection; gastric ulcer; adenocarcinoma; PCR primer; ss.
XX
OS Synthetic.
OS Staphylococcus aureus.
XX
XX EP905243-A2.
XX
XX 31-MAR-1999.
XX
XX 03-AUG-1998; 98EP-00306185.
XX
XX 05-AUG-1997; 97US-0055387P.
XX
XX (SMIK ) SMITHKLINE BEECHAM CORP.
XX (SMIK ) SMITHKLINE BEECHAM PLC.
XX
XX Lonetto MA, Warren PV, Burnham MKR;
XX
XX WPI; 1999-192667/17.
XX
XX New essential polypeptides from Staphylococcus aureus useful for treating
XX diseases such as infective endocarditis and toxic shock syndrome.
XX
XX Example 2; Page 46; 70pp; English.
XX
XX The invention provides new Staphylococcus aureus polypeptides (AAZ03781-
XX 94) and the genes (AAZ31851-864) encoding them. Host cells containing
XX vectors comprising the nucleic acid sequences are used for the
XX recombinant expression of the proteins. The polypeptides can be used to
XX screen for modulators for use in antibacterial therapy. The polypeptides,
XX their antagonists and agonists are used to prevent or treat diseases
XX caused by S. aureus such as thyroiditis, lung abscesses, infective
XX carditis, secretory diarrhoea, cerebral abscesses, conjunctivitis, toxic
XX shock syndrome folliculitis and septic arthritis. Screening for the
XX presence of the polypeptides may be used to diagnose, predict the
XX susceptibility to, or stage the progress of these S. aureus diseases and
XX diseases caused by Helicobacter pylori such as gastric ulcers and gastric
XX adenocarcinoma. There is not much information known about the essential
XX genes expressed by S. aureus during infection but these new polypeptides
XX have been identified as essential. They can therefore be used to develop
XX antibacterial compounds specific for those essential genes and this
XX ensures the effectiveness of the compounds in killing S. aureus. In
XX addition, these polypeptides can be used to effectively diagnose and
XX treat infections and diseases caused by S. aureus without the risk of
XX development of antibiotic resistance. Sequences AAZ31863-884 represent
XX PCR primers used for the amplification of the DNAs encoding the S. aureus
XX polypeptides of the invention
XX
XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 132 GATGAAGAGATCAA 146
DB 2 GATGAAGAGATCCA 16
XX
RESULT 2228

```

XX Prohibitin gene; cancer risk; 3' untranslated region; UTR;
KW germline polymorphism; susceptibility marker; cancer;
KW genetic counselling; cancer prognosis; PCR primer; ss.
OS Synthetic.
OS Homo sapiens.
XX WO9924614-A1.
XX 20-MAY-1999.
XX 06-NOV-1998; 98WO-US023686.
XX 06-NOV-1997; 97US-0064880P.
XX (OKLA-) OKLAHOMA MEDICAL RES FOUND.
XX Jupe ER, Thompson LF, Resta R, Dell'orco RT;
XX WPI; 1999-337719/28.
XX New diagnostic assay for cancer susceptibility using nucleotide
PT identification of the prohibitin gene.
XX
PS Disclosure; Page 36; 43pp; English.
XX
CC The specification describes a method for determining the identity of
CC nucleotide 729 of the prohibitin gene as a means of determining the risk
CC of cancer other than breast cancer. The method comprises determining the
CC base identity of a portion of genomic DNA from a patient cell, where the
CC genomic DNA comprises an untranslated region (UTR) of a prohibitin gene,
CC the portion corresponding to position 729 of the sequence given in
CC AAX59834, and correlating the base identity with germline polymorphisms
CC indicative of a risk for the cancer. The prohibitin gene germline
CC polymorphism in the 3' UTR is used as a susceptibility marker for cancer
CC other than breast cancer. The method determines the lifetime probability
CC of an individual developing cancer based on an allelic variation found in
CC the 3'UTR of the prohibitin gene. This assay could be used in genetic
CC counselling and cancer prognosis, prediction of disease-free intervals,
CC long-term survivorship, and determination of therapy for both men and
CC women. PCR primers AAX59837-38 were used to amplify a fragment of the
CC prohibitin gene
XX
SQ Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 566 GCCTCCGTCGTGTC A 580
Db 2 GCCTCCGTCGTGTC A 16
|||||
|||||

RESULT 2230
AAA83293
ID AAA83293 standard; DNA; 19 BP.
XX
AC AAA83293;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk8 ribozyme binding site #13.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX

PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis. Cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 59; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAX82435 to AAX86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 657 CGTCTACAAAGCCAA 671
Db 5 CGTCTACAAAGCCAA 19
|||||
|||||

RESULT 2231
ABA81519/c
ID ABA81519 standard; DNA; 19 BP.
XX
AC ABA81519;
XX
DT 24-JAN-2002 (first entry)
XX
DE Targeted chromosomal genomic alteration expression vector primer #7.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; App; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antileptic; PCR primer; ss.
XX
OS Unidentified.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.
XX
XX Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX
XX Example 1; Page 17; 294pp; English.
XX
XX The present invention provides single-stranded oligonucleotides which can
XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin, 2A
XX CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is a PCR primer described in the
XX CC exemplification of the invention
XX
XX Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 802 CATGACATTATCCAC 816
Db 16 CAGGACATTATCCAC 2
RESULT 2232
AAH37489/C
ID AAH37489 standard; DNA; 19 BP.
XX
XX AAH37489;
AC
XX
XX 14-AUG-2001 (first entry)
DT
DE SNP specific upper PCR primer SEQ ID 285.
XX
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
XX KW SNPR; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
XX KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
XX KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
XX KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
XX KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200129262-A2.
XX
XX 26-APR-2001.
PD
XX
XX 13-OCT-2000; 2000WO-US028436.
PF
XX
XX 15-OCT-1999; 99US-0160096P.
PR
XX
XX (ORCH-) ORCHID BIOSCIENCES INC.
PA
XX
XX Picoult-Newburg L, Pohl M;
PI
XX
XX WPI; 2001-290930/30.
DR
XX
XX New genotyping oligonucleotide, useful for detecting the presence,
XX PT absence or identity of single polynucleotide polymorphism in a nucleic
XX PT acid sample.

XX Claim 1; Page 51; 83pp; English.
XX
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX CC primer extension (SNPE) primers, and the sequences of regions flanking
XX CC sites of single nucleotide polymorphisms SNPs. The present invention
XX CC includes kits for determining the presence or absence of a SNP, using the
XX CC oligonucleotides of the invention. The PCR primers are used to amplify a
XX CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX CC The oligonucleotides are useful for genotyping a nucleic acid sample by
XX CC performing a single-nucleotide primer extension reaction. The
XX CC oligonucleotides are useful for determining the presence, absence or
XX CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX CC assess by association analysis the phenotype of an individual or group of
XX CC individuals, having a pathological phenotypic trait suspected of being
XX CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX CC traits also include symptoms of or susceptibility to multifactorial
XX CC disease of which a component is or may be genetic such as autoimmune
XX CC diseases, including, rheumatoid arthritis, multiple sclerosis,
XX CC inflammation, cancer, nervous system diseases and infection by pathogenic
XX CC microorganism. The method is also useful in forensic investigations and
XX CC paternity analysis. The present sequence represents a PCR primer specific
XX CC for a human SNP containing DNA sequence
XX
XX Sequence 19 BP; 2 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1299 CGAGGAGTTCAGAC 1313
Db 17 CCAGGAGTTCAGAC 3
RESULT 2233
AAH58455
ID AAH58455 standard; DNA; 19 BP.
XX
XX AAH58455;
AC
XX
XX 10-SEP-2001 (first entry)
DT
DE Cell-cycle dependent kinase cdk8 ribozyme binding site SEQ ID NO:879.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulvarry;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; WMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisking; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
OS
XX WO200130362-A2.
XX
XX 03-MAY-2001.
PD
XX
XX 26-OCT-2000; 2000WO-US029500.
PF
XX
XX 26-OCT-1999; 99US-0161532P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Robbins JM, Tritz R;
PI

XX WPI; 2001-300427/31.
 XX
 PT Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 PS
 PS Example 1; Page 135; 408pp; English.
 XX
 CC The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
 CC ophthalmological, vulvular, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 657 CGTCTACAAAGCAA 671
 DB 5 CGTCTACAAAGCAA 19
 RESULT 2234
 ABK24631/C
 ID ABK24631 standard; DNA; 19 BP.
 XX
 AC ABK24631;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Hygromycin-B coding sequence PCR primer #7.
 XX
 KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 KW o-methyl modification; LNA modification; phosphorothioate linkage;
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 KW abiotic stress tolerance; improved nutritional value; hygromycin-B;
 KW amino acid over production; herbicide resistance; glyphosate resistance;
 KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
 KW porphyrin herbicide resistance; triazine resistance; disease resistance;
 KW modified oil production; modified starch production; waxy starch;
 KW altered floral morphology; male-sterile plant; albino mutant;
 KW modified fatty acid content; reduced palmitate production; albino plant;
 KW increased stearate production; reduced linolenic acid production;
 KW photosynthetic process.
 XX
 OS Mammalia.
 OS Synthetic.
 XX
 PN WO200192512-A2.
 XX
 PD 06-DEC-2001.
 XX
 DF 01-JUN-2001; 2001WO-US017672.
 XX
 XX 01-JUN-2000; 2000US-0208538P.
 PR

PR 30-OCT-2000; 2000US-0244989P.
 PR 27-MAR-2001; 2001US-00818875.
 XX
 PA (UYDE) UNIV DELAWARE.
 XX
 PI Kmiec EB, Gamper HB, Rice MC, Kim J;
 XX
 DR WPI; 2002-106307/14.
 XX
 XX New oligonucleotides with modified nuclease-resistant termini, useful for
 PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 PT nutritional value, herbicide or disease resistance, or modified oil
 PT production.
 XX
 PS Example 1; Page 20; 220pp; English.
 XX
 CC The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of o-methyl modification, an LNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 XX
 SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 802 CATGACATTATCCAC 816
 DB 16 CAGGACATTATCCAC 2
 RESULT 2235
 AAL50058/C
 ID AAL50058 standard; DNA; 19 BP.
 XX
 AC AAL50058;
 XX
 DT 12-DEC-2002 (first entry)
 XX
 DE Murine alphabeta T-cell receptor related PCR primer #5.
 XX
 KW Mouse; alphabeta T-cell receptor; p53 protein specific T-cell response;
 KW cytostatic; apoptotic; cancer; leukaemia; immunisation; gene therapy;
 KW vaccine; PCR; primer; ss.
 XX
 OS Mus musculus.
 XX
 PN DE10109855-A1.
 XX
 PD 12-SEP-2002.
 XX
 PF 01-MAR-2001; 2001DE-01009855.
 XX
 XX 01-MAR-2001; 2001DE-01009855.
 PR

XX (STAN/) STANISLAWSKI T.
 XX
 XX
 PI Schmitz F, Voss H, Theobalt M;
 XX
 DR WPI; 2002-714557/78.
 XX
 XX New polypeptide of a murine alpha, beta T-cell receptor, useful for
 PT treating tumors and leukemia, and induces specific lysis or apoptosis of
 PT cells expressing p53 protein.
 XX
 XX Example 1; Page 17; 30pp; German.
 XX
 XX The present invention relates to murine alphabeta T-cell receptors (TCR)
 CC which mediate a p53 protein-specific T cell response. The proteins and
 CC their coding sequences are useful for treatment, prevention and diagnosis
 CC of p53-associated diseases, particularly tumors and leukemia, including
 CC use for passive or active immunisation, and also to screen for
 CC therapeutic agents. The present sequence is a PCR primer used to identify
 CC a protein of the invention
 XX
 XX Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1173 CATCTTCTATGAGAT 1187
 Db ||||| ||||| |||||
 17 CATCTTCTATGAGAT 3
 RESULT 2236
 ABS64429/C
 ID ABS64429 standard; DNA; 19 BP.
 XX
 XX
 AC ABS64429;
 XX
 XX 15-NOV-2002 (first entry)
 XX
 XX Human NOVX forward PCR primer Ag2496.
 DE
 XX
 KW Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
 KW Parkinson's disease; Huntington's disease; neurological disorder;
 KW schizophrenia; manic depression; mental retardation; angina pectoris;
 KW cardiovascular disease; acute heart failure; myocardial infarction;
 KW muscular disease; muscular disorder; retinal disease; photoreception;
 KW deafness; keratinisation disorder; inflammatory disease; immune disease; melanoma;
 KW immunological disorder; fungal infection; protozoal infection; diabetes;
 KW bacterial infection; reproductive system disorder; metabolic disturbance;
 KW anorexia; wasting disorder; chronic disease; infectious disease;
 KW dyslipidaemia; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200264791-A2.
 PN
 XX
 PD 22-AUG-2002.
 XX
 XX
 XX 10-DEC-2001; 2001WO-US048369.
 XX
 XX 08-DEC-2000; 2000US-0254329P.
 PR
 PR 14-DEC-2000; 2000US-0255648P.
 PR
 PR 15-MAY-2001; 2001US-0291037P.
 PR
 PR 08-JUN-2001; 2001US-0297173P.
 PR
 PR 08-JUN-2001; 2001US-0309258P.
 PR
 PR 29-AUG-2001; 2001US-0315639P.
 PR
 PR 01-OCT-2001; 2001US-0326393P.
 XX
 XX (CURA-) CURAGEN CORP.
 XX
 XX Alsbrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
 PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, MacDougall JR;
 PI Millet I, Pena CE, Peyman JA, Rastelli L, Rieger DK, Shinkets RA;
 PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss BZ;
 PI Zernhusen BD, Zhong H, Zhong M;
 XX
 XX WPI; 2002-643486/69.
 XX
 XX New NOVX polypeptides and polynucleotides useful for treating or
 PT preventing e.g. neurodegenerative diseases, neurological disorders,
 PT cardiovascular diseases, muscular diseases and disorders, or
 PT immunological diseases.

CC specific antibody) and a method for identifying hdm2-specific antigens.
 CC The TCR of the invention has cytostatic and apoptotic activity. The
 CC products of the invention are useful for treatment, prevention and
 CC diagnosis of hmd2-associated diseases, particularly tumours and
 CC leukaemia, including use for passive or active immunisation. They can
 CC also be used to screen for therapeutic agents. This sequence represents a
 CC PCR primer used in the construction of the fusion constructs described in
 CC the disclosure of the invention
 XX
 XX Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1173 CATCTTCTATGAGAT 1187
 Db ||||| ||||| |||||
 17 CATCTTCTATGAGAT 3
 RESULT 2237
 ABS64429/C
 ID ABS64429 standard; DNA; 19 BP.
 XX
 XX
 AC ABS64429;
 XX
 XX 15-NOV-2002 (first entry)
 XX
 XX Human NOVX forward PCR primer Ag2496.
 DE
 XX
 KW Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
 KW Parkinson's disease; Huntington's disease; neurological disorder;
 KW schizophrenia; manic depression; mental retardation; angina pectoris;
 KW cardiovascular disease; acute heart failure; myocardial infarction;
 KW muscular disease; muscular disorder; retinal disease; photoreception;
 KW deafness; keratinisation disorder; inflammatory disease; immune disease; melanoma;
 KW immunological disorder; fungal infection; protozoal infection; diabetes;
 KW bacterial infection; reproductive system disorder; metabolic disturbance;
 KW anorexia; wasting disorder; chronic disease; infectious disease;
 KW dyslipidaemia; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200264791-A2.
 PN
 XX
 PD 22-AUG-2002.
 XX
 XX
 XX 10-DEC-2001; 2001WO-US048369.
 XX
 XX 08-DEC-2000; 2000US-0254329P.
 PR
 PR 14-DEC-2000; 2000US-0255648P.
 PR
 PR 15-MAY-2001; 2001US-0291037P.
 PR
 PR 08-JUN-2001; 2001US-0297173P.
 PR
 PR 08-JUN-2001; 2001US-0309258P.
 PR
 PR 29-AUG-2001; 2001US-0315639P.
 PR
 PR 01-OCT-2001; 2001US-0326393P.
 XX
 XX (CURA-) CURAGEN CORP.
 XX
 XX Alsbrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
 PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, MacDougall JR;
 PI Millet I, Pena CE, Peyman JA, Rastelli L, Rieger DK, Shinkets RA;
 PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss BZ;
 PI Zernhusen BD, Zhong H, Zhong M;
 XX
 XX WPI; 2002-643486/69.
 XX
 XX New NOVX polypeptides and polynucleotides useful for treating or
 PT preventing e.g. neurodegenerative diseases, neurological disorders,
 PT cardiovascular diseases, muscular diseases and disorders, or
 PT immunological diseases.

XX PS Example 2; Page 264; 299pp; English.

XX CC The present invention relates to new NOVX polypeptides. The polypeptides, polynucleotides and antibodies are useful in the manufacture of a

CC CC medicament for treating or preventing neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease, or Huntington's disease),

CC CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or mental retardation), cardiovascular disease (e.g. acute heart failure,

CC CC angina pectoris or myocardial infarction), muscular diseases and disorders, retinal diseases (including those involving photoreception,

CC CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or melanoma), immunological disorders, inflammatory and immune diseases,

CC CC bacterial, fungal, protozoal and viral infections, and reproductive system disorders. The proteins of the invention may be used to screen

CC CC drugs or compounds that modulate the NOVX protein activity or expression, as well as to treat disorders characterised by insufficient or excessive

CC CC production of NOVX protein or protein forms that have decreased or aberrant activity compared to NOVX wild type protein, such as diabetes,

CC CC obesity, metabolic disturbances associated with obesity, anorexia and wasting disorders associated with chronic diseases and various cancers,

CC CC infectious diseases and various dyslipidaemias. The nucleic acid sequences of the invention may be used in chromosome mapping, identifying

CC CC an individual from minute biological samples (tissue typing), and in forensic identification of a biological sample. The present nucleic acid

CC CC sequence represents a PCR primer that was used in the methods of the invention for amplification of NOVX genes

XX CC

SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1391 TCACCAAGCTGCTGC 1405
 ||||| |||||
 Db 15 TCACCATGCTGCTGC 1

RESULT 2238
 ADF32509/c
 ID ADF32509 standard; DNA; 19 BP.
 XX AC ADF32509;
 XX DT 12-FEB-2004 (first entry)
 XX DE ADH1 reverse transcriptase PCR primer R.
 XX KW transgenic plant; enhanced stress tolerance;
 KW abscisic acid responsive element-binding transcription factor; ABF;
 KW reverse transcriptase; PCR primer; ss.
 XX OS Synthetic.

XX PN KR2002042796-A.
 XX PD 07-JUN-2002.
 XX PF 27-MAY-2002; 2002KR-00029205.
 XX PR 27-MAY-2002; 2002KR-00029205.
 XX PA (KOKU-) KOREA KUMHO PETROCHEMICAL CO LTD.
 XX PI Choi HI, Kim SY;
 XX DR WPI; 2002-747965/81.
 XX PT Transgenic plants with enhanced stress tolerance.
 XX PS Example; Page 11; 18pp; Korean.

CC CC The present invention describes transgenic plants with enhanced stress tolerance. The transgenic plant with enhanced stress tolerance is composed of recombinant DNA segments encoding abscisic acid responsive element-binding transcription factors (ABFs) and expresses an effective amount of ABFs sufficient to increase tolerance to stress, where the ABF is ABF3 and/or ABF4. The present invention also describes a method for increasing tolerance against decreased water utility and other environmental stress comprises constructing an expression vector containing a nucleotide sequence for controlling over or under expression of ABF and an ABF gene in the sense or anti-sense direction, introducing the expression vector into a plant cell using Agrobacterium-mediated transformation, ballistic transformation or other transformation, and selecting and maintaining transformed cell capable of expressing the recombinant ABF. The present sequence represents a reverse transcriptase (RT) PCR primer which is used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 958 CGCAGAAAGGTGCTA 972
 ||||| |||||
 Db 15 CTGCAGAAAGGTGCTA 1

RESULT 2239
 ADC39346/c
 ID ADC39346 standard; DNA; 19 BP.
 XX AC ADC39346;
 XX DT 18-DEC-2003 (first entry)
 XX DE Novel human NOVX gene forward primer SEQ ID NO: 290.
 XX KW antidiabetic; cytostatic; immunomodulator; anorectic; antilipemic;
 KW neurotropic; neuroprotective; immunostimulant; antiparkinsonian; anti-HIV;
 KW antiasthmatic; antiinflammatory; hypotensive; antiarteriosclerotic;
 KW hemostatic; osteopathic; gene therapy.; NOVX; diabetes; obesity; cancer;
 KW lymphoma; uterus cancer; prostate cancer; dyslipidemia; anorexia;
 KW wasting disorder; Alzheimer's disease; Parkinson's disorder; cachexia;
 KW cardiomyopathy; AIDS; asthma; Crohn's disease; multiple sclerosis;
 KW hypertension; atherosclerosis; hemophilia; graft-versus-host disease;
 KW Albright hereditary osteodystrophy; ss; primer.

XX OS Homo sapiens.
 XX PN WO2003010327-A2.
 XX PD 06-FEB-2003.
 XX PF 02-MAY-2002; 2002WO-US014199.
 XX PR 02-MAY-2001; 2001US-0288063P.
 PR 03-MAY-2001; 2001US-0288395P.
 PR 07-MAY-2001; 2001US-0289087P.
 PR 09-MAY-2001; 2001US-0289817P.
 PR 09-MAY-2001; 2001US-0289818P.
 PR 11-MAY-2001; 2001US-0290194P.
 PR 14-MAY-2001; 2001US-0290753P.
 PR 15-MAY-2001; 2001US-0291181P.
 PR 16-MAY-2001; 2001US-0291243P.
 PR 18-MAY-2001; 2001US-0292001P.
 PR 21-MAY-2001; 2001US-0292374P.
 PR 22-MAY-2001; 2001US-0292587P.
 PR 23-MAY-2001; 2001US-0293107P.
 PR 25-MAY-2001; 2001US-0293747P.
 PR 29-MAY-2001; 2001US-0294109P.
 PR 29-MAY-2001; 2001US-0294110P.
 PR 30-MAY-2001; 2001US-0294434P.

PR 31-MAY-2001; 2001US-0294827P.
PR 12-JUL-2001; 2001US-0304879P.
PR 31-JUL-2001; 2001US-0308901P.
PR 14-AUG-2001; 2001US-0312270P.
PR 17-AUG-2001; 2001US-0313416P.
PR 10-SEP-2001; 2001US-0318463P.
PR 27-SEP-2001; 2001US-0325683P.
PR 18-OCT-2001; 2001US-0330292P.
PR 28-NOV-2001; 2001US-0333873P.
PR 03-DEC-2001; 2001US-0336909P.
PR 03-DEC-2001; 2001US-0337552P.
PR 21-FEB-2002; 2002US-0359245P.
PR 01-MAY-2002; 2002US-00136826.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Miller CE, Kekuda R, Malyankar UM, Li L, Pena CEA, Spytek KA;
PI Gorman L, Guo X, Fernandes ER, Smithson G, Stone DU, Zerhusen BD;
PI Patturajan M, Anderson DW, Mezes PS, Peyman JA, Macdougall JR;
PI Padigaru M, Rastelli L, Shenoy SG, Gerlach VL, Shinkets RA, Zhong M;
PI Edinger SR, Ellerman K;
XX
XX WPI; 2003-239445/23.
XX
XX New NOVX polypeptides and polynucleotides, useful in gene therapy,
PT particularly for treating or preventing a syndrome associated with a
PI human disease e.g. diabetes, obesity, cancer, Alzheimer's disease,
PT hypertension or hemophilia.
XX
XX Disclosure; SEQ ID NO 290; 748pp; English.
XX
XX The invention relates to new isolated NOVX polypeptides, the genes
CC encoding them or sequences having at least 95% identity to the amino acid
CC or nucleotide sequences. The NOVX polypeptide is useful as a therapeutic,
CC particularly in the manufacture of a medicament for treating a syndrome
CC associated with a human disease, which includes a pathology associated
CC with NOVX polypeptide. The NOVX polypeptide is particularly useful for
CC treating, preventing or alleviating pathology associated with NOVX
CC polypeptide in a mammal, e.g. a human. The NOVX nucleic acid and
CC polypeptide are especially useful for treating or preventing e.g.
CC diabetes, obesity, cancers (e.g. lymphoma, uterus cancer or prostate
CC cancer), dyslipidemias, anorexia, wasting disorders, Alzheimer's disease,
CC Parkinson's disorder, cachexia, cardiomyopathy, AIDS, asthma, Crohn's
CC disease, multiple sclerosis, hypertension, atherosclerosis, hemophilia,
CC graft-versus-host disease or Albright hereditary osteodystrophy. The DNA
CC encoding the protein is useful in gene therapy for treating the above
CC conditions. These are also useful in developing powerful assay system for
CC functional analysis of various human disorders, as well as in diagnostic
CC applications. This sequence represents a forward PCR primer used to
CC amplify and isolate one of the NOVX genes of the invention.
XX
XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1391 TCACCAAGCTGTTC 1405
Db 15 TCACCATGCTGTTC 1
RESULT 2240
ADE29716/c
ID ADE29716 standard; RNA; 19 BP.
XX
XX ADE29716;
AC
XX 29-JAN-2004 (first entry)
DT
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:338.
DE
XX short interfering nucleic acid; siNA; downregulation; inhibition;
KW

KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
OS
XX WO2003072590-A1.
PN
XX 04-SEP-2003.
PD
XX
XX 28-JAN-2003; 2003WO-US002510.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR
XX 11-MAR-2002; 2002US-0363124P.
PR
XX 06-JUN-2002; 2002US-0386782P.
PR
XX 29-AUG-2002; 2002US-0406784P.
PR
XX 05-SEP-2002; 2002US-0408378P.
PR
XX 09-SEP-2002; 2002US-0409293P.
PR
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI
XX WPI; 2003-689980/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX
XX Example 3; SEQ ID NO 338; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a mitogen-activated protein kinase
CC (MAPK) genes by RNA interference. Also described: (1) a method for
CC modulating expression of MAPK genes in cells, tissue explants or
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
CC vectors that express siNA and cells containing these vectors. MAPK siNA
CC have cytostatic, anorectic, antidiabetic, antirheumatic, antiinflammatory,
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC antipsoriatic, antipsoriatic and gastrointestinal activities. The MAPK
CC siNA can be used to modulate the expression of MAPK genes in cells,
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC and II; a wide range of tumours, and inflammatory diseases (asthma,
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC disease). They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents a MAPK siNA which is used
CC in the exemplification of the present invention.
XX
XX Sequence 19 BP; 3 A; 5 C; 9 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 105 CGCGCCCGCCCGCAT 119
Db 15 CGCGCCCGCCCGCAT 1
RESULT 2241
ADE29821
ID ADE29821 standard; RNA; 19 BP.
XX
XX ADE29821;
AC
XX

DT 29-JAN-2004 (first entry)
DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:443.
XX
XX short interfering nucleic acid; siNA; downregulation; inhibition;
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX Synthetic.
XX OS
XX WO2003072590-A1.
XX PN
XX 04-SEP-2003.
XX PD
XX 28-JAN-2003; 2003WO-US002510.
XX PF
XX 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX (STRN-) STRNA THERAPEUTICS INC.
XX PA
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI WPI; 2003-689980/65.
XX DR
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of mitogen-activated
PT protein kinase genes.
XX
XX Example 3; SEQ ID NO 443; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a mitogen-activated protein kinase
CC (MAPK) genes by RNA interference. Also described: (1) a method for
CC modulating expression of MAPK genes in cells, tissue explants or
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
CC vectors that express siNA and cells containing these vectors. MAPK siNAs
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC siNAs can be used to modulate the expression of MAPK genes, in cells,
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC and II; a wide range of tumours, and inflammatory diseases (asthma,
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC disease). They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents a MAPK siNA which is used
CC in the exemplification of the present invention.
XX
XX SQ Sequence 19 BP; 2 A; 9 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 86.7%; Pred. No. 1.2e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 105 CGCGCCCGCCCGCAT 119
||||| |||||
Db 5 CGCGCCCGCCCGCAU 19
||||| |||||
RESULT 2242

ADF48372/c
ID ADF48372 standard; RNA; 19 BP.
XX
AC ADF48372;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human Myb siNA lower strand, SEQ ID 509.
XX
KW Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic;
KW nephrotropic; ss.
XX
XX OS
XX Homo sapiens.
XX PN WO2003070917-A2.
XX
XX 28-AUG-2003.
XX PD
XX 20-FEB-2003; 2003WO-US005326.
XX PF
XX 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-OCT-2002; 2002US-0418655P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J, Beigelman L;
PI WPI; 2003-689784/65.
XX DR
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX Example 7; Page 133; 161pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human Myb-targeted
CC double-stranded siNA.
XX
XX SQ Sequence 19 BP; 4 A; 2 C; 3 G; 0 T; 10 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 134 TGAAGAAGATCAAAAC 148
15 TGAAGAAATCAAAAC 1

RESULT 2243

ADF48193
ID ADF48193 standard; RNA; 19 BP.

AC ADF48193;

XX 12-FEB-2004 (first entry)

DE Human Myb transcript target sequence/siNA upper strand, SEQ ID 330.

XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW Polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; siRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic;
KW nephrotropic; ss.

XX Homo sapiens.

XX WO2003070917-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US000326.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-OCT-2002; 2002US-0418655P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689784/65.

XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of Myc or Myb genes.

XX Example 7; Page 133; 161pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human Myc or Myb genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNA can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the Myc or Myb genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancers and other proliferative diseases, such as
XX restenosis and polycystic kidney disease. The siNAs are also useful for
XX drug screening, diagnosis, therapeutic target identification and
XX validation, genetic engineering, pharmacogenomics, studying gene

CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myb-targeted
CC double-stranded siNA, which is identical to the Myb transcript target
CC sequence.

XX Sequence 19 BP; 10 A; 3 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 80.0%; Pred. No. 1.2e+03;

Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 134 TGAAGAAGATCAAAAC 148

Db 5 UGAAGAAATCAAAAC 19

RESULT 2244

ADF71308/c

ID ADF71308 standard; RNA; 19 BP.

XX ADF71308;

XX 12-FEB-2004 (first entry)

DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 93.

XX short interfering nucleic acid; siNA;

XX protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;

XX cancer; ss.

XX Homo sapiens.

XX WO2003070886-A2.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004347.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Usman N;

XX WPI; 2003-697606/66.

XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of a protein tyrosine
XX phosphatase type IVa gene.

XX Example 3; SEQ ID NO 93; 131pp; English.

XX The invention relates to a novel short interfering nucleic acid (siNA)
XX that downregulates expression of a protein tyrosine phosphatase type IV
XX (PRL3) gene by RNA interference. The invention further relates to
XX modulating the expression of PRL3 genes in cells, tissue explants or
XX organisms by the introduction of an siNA; kits for in vitro or in vivo
XX delivery of an siNA; conjugates and/or complexes of siNA; and vectors
XX that express siNA. The novel siNA's of the invention have cytostatic
XX activity. siNA's are used to modulate expression of PRL3 genes, in cells,
XX tissue explants or organisms, e.g. for treating cancer but also for drug
XX screening; diagnosis; target identification and validation; genetic
XX engineering; pharmacogenomics; studying gene function and gene mapping
XX (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
XX represents a short interfering nucleic acid for downregulating the
XX expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
XX invention.

```
XX SQ Sequence 19 BP; 3 A; 8 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 120 CGCCATGGATCGGAT 134
DB 15 CGCCATGGCTCGGAT 1

RESULT 2245
ADF71234
ID ADF71234 standard; RNA; 19 BP.
XX AC ADF71234;
XX DT 12-FEB-2004 (first entry)
XX KW Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 19.
XX DE short interfering nucleic acid; siNA;
XX KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytosstatic;
XX KW cancer; ss.
XX OS Homo sapiens.
XX XX WO2003070886-A2.
XX PN 28-AUG-2003.
XX PD 11-FEB-2003; 2003WO-US004347.
XX PF 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX (RIBO-) RIBOZYME PHARM INC.
XX PA Mcswiggen J, Beigelman L, Usman N;
XX PI WPI; 2003-697606/66.
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of a protein tyrosine
XX PT phosphatase type IVa gene.
XX XX Example 3; SEQ ID NO 19; 131pp; English.
XX CC The invention relates to a novel short interfering nucleic acid (siNA)
XX CC that downregulates expression of a protein tyrosine phosphatase type IV
XX CC (PRL3) gene by RNA interference. The invention further relates to
XX CC modulating the expression of PRL3 genes in cells, tissue explants or
XX CC organisms by the introduction of an siNA; kits for in vitro or in vivo
XX CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
XX CC that express siNA. The novel siNA's of the invention have cytostatic
XX CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
XX CC tissue explants or organisms, e.g. for treating cancer but also for drug
XX CC screening; diagnosis; target identification and validation; genetic
XX CC engineering; pharmacogenomics; studying gene function and gene mapping
XX CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
XX CC represents a short interfering nucleic acid for downregulating the
XX CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
XX SQ Sequence 19 BP; 3 A; 5 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;

XX SQ Sequence 19 BP; 3 A; 5 C; 8 G; 0 T; 3 U; 0 Other;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 120 CGCCATGGATCGGAT 134
DB 5 CGCCAUGGCUCGGAU 19

RESULT 2246
ADF86352
ID ADF86352 standard; DNA; 19 BP.
XX AC ADF86352;
XX DT 26-FEB-2004 (first entry)
XX XX Human integrin alpha-6-beta-4 RT-PCR primer SeqID1.
XX KW integrin alpha-6-beta-4 production; plant extract; Hedera helix;
XX KW English ivy; Echinacea; pumpkin; Taraxacum officinale; dandelion;
XX KW angelica; cosmetic; skin lotion; cream; ointment; foundation; hand cream;
XX KW hair cosmetic; skin ageing; laminin adhesion;
XX KW outer skin basement membrane; outer skin basal cell; skin wrinkle;
XX KW skin dullness; skin sag; youthful skin; PCR; primer; ss; human; RT-PCR;
XX KW reverse transcription PCR.
XX OS Homo sapiens.
XX XX JP2003171225-A.
XX PN 17-JUN-2003.
XX PD 30-NOV-2001; 2001JP-00366056.
XX PF 30-NOV-2001; 2001JP-00366056.
XX PR (FANK-) FANKERU KK.
XX PA WPI; 2003-819090/77.
XX DR Composition for promoting integrin alpha-6-beta-4 used in cosmetics,
XX PT contains extracts of plant selected from Hedera helix, Echinacea,
XX PT pumpkin, Taraxacum officinale or angelica.
XX PS Example; SEQ ID NO 1; 9pp; Japanese.
XX XX This invention relates to a novel composition for human integrin alpha-6-
XX CC beta-4 production promotion which contains extracts of a plant selected
XX CC from Hedera helix (English ivy), Echinacea, pumpkin, Taraxacum officinale
XX CC (dandelion) or angelica. The invention is useful as cosmetics such as
XX CC skin lotion, cream, ointment, foundation, hand cream and hair cosmetics
XX CC for preventing ageing of skin. The composition promotes adhesion of
XX CC laminin, which is a structural component of the outer skin basement
XX CC membrane, and outer skin basal cells. The compositions improve the
XX CC wrinkle, dullness and sag of skin as well as maintaining youthful skin.
XX SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 881 ACTGTGGGAACATCA 895
DB 3 ACTGTGTGAACATCA 17

RESULT 2247
ADF84774/C
ID ADF84774 standard; RNA; 19 BP.
XX AC ADF84774;
XX XX
```

```
DT 26-FEB-2004 (first entry)
XX
DE Human ABL1-targeted siRNA - SEQ ID 1068.
XX
KW short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
XX Homo sapiens.
OS
XX WO2003070972-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 15-AUG-2002; 2002US-0404039P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 14-JAN-2003; 2003US-0439922P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 1068; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ABL1-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 6 A; 5 C; 7 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 931 CTGCTCCGTGGCCTG 945
Db 16 CTGCTCCGTGGACTG 2
RESULT 2248
ADF84455
ID ADF84455 standard; RNA; 19 BP.
XX
XX ADF84455;
AC
XX
XX 26-FEB-2004 (first entry)
DT
XX Human ABL1-targeted siRNA - SEQ ID 749.
DE
XX short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
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```
OS Homo sapiens.
XX
XX WO2003070972-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 15-AUG-2002; 2002US-0404039P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 14-JAN-2003; 2003US-0439922P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 749; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ABL1-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 1 A; 7 C; 5 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 1.2e+03;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 931 CTGCTCCGTGGCCTG 945
Db 4 CUGCUCGUGGACUG 18
RESULT 2249
ADF77926
ID ADF77926 standard; DNA; 19 BP.
XX
XX ADF77926;
AC
XX
XX 26-FEB-2004 (first entry)
DT
XX Integrin alpha-6 RT-PCR primer SEQ ID NO:1.
DE
XX Skin ageing; prevention; improvement; laminin-5; integrin alpha-6;
KW integrin beta-4; plant extract; rice bran oil; phenyl propanoides;
KW skin basal membrane activation; epidermal basal cell activation;
KW light-induced damage suppression; wrinkle prevention;
KW staining prevention; skin dullness prevention; skin maintenance; cosmetic;
KW human; keratinocyte; expression analysis; reverse transcription-PCR;
KW RT-PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX JP2003226655-A.
PN
XX
```

PD 12-AUG-2003.
XX
PP 31-JAN-2002; 2002JP-00022671.
XX
PR 31-JAN-2002; 2002JP-00022671.
XX
PA (FANK-) FANKERU KK.
XX
FA WPI; 2003-837162/78.
DR
XX
PT Composition for preventing and improving ageing of skin, comprises
PT component that promotes laminin and integrin production.
XX
PS Example; SEQ ID NO 1; 17pp; Japanese.
XX
XX The invention relates to a composition for the prevention and improvement
CC of skin ageing. The composition comprises a component which promotes the
CC production of laminin-5 and the integrins alpha-6 and beta-4. The active
CC component used in the composition is preferably an extract from the
CC plants Euphoria longan, Strobilanthes cusia, Polygonatum falcatum,
CC Polygonatum sibiricum, ivy (Hedera helix), Echinacea, pumpkin (Cucurbita
CC pepo), dandelion (Taraxacum officinale), and/or angelica (Angelica
CC archangelica); rice bran oil; or phenyl propanoides or its salt. The
CC composition prevents the ageing of skin by activating skin basal membrane
CC and/or epidermal basal cells, and by suppressing light-induced damage.
CC The composition also prevents wrinkle formation, staining and skin
CC dullness, and helps to maintain the skin in a healthy condition.
CC Sequences ADF77926-ADF77931 represent reverse transcription-PCR (RT-PCR)
CC primers used in an example of the invention to determine the effect of
CC various plant extracts on integrin alpha-6 and integrin beta-4 gene
CC expression in human keratinocytes, using glyceraldehyde-3-phosphate
CC dehydrogenase (G3PDH) gene expression as a control.
XX
SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 881 ACTGTGGGAACATCA 895
||||| |||||||
Db 3 ACTGTGTGAACATCA 17
RESULT 2250
ADL79883/C
ID ADL79883 standard; RNA; 19 BP.
XX
AC ADL79883;
XX
XX 20-MAY-2004 (first entry)
DT
XX Human HER1 (EGFR) siNA lower strand, SEQ ID NO:1048.
DE
XX RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
KW HER1; c-erb-B-1; ss.
XX
OS Homo sapiens.
XX
XX WO2003070912-A2.
PN
XX 28-AUG-2003.
PD
XX 20-FEB-2003; 2003WO-US005045.
PF
XX 20-FEB-2002; 2002US-0358580P.
PR
PR 11-MAR-2002; 2002US-0363124P.
PR
PR 29-MAY-2002; 2002WO-US016840.

PR 06-JUN-2002; 2002US-00163552.
PR
PR 06-JUN-2002; 2002US-0386782P.
PR
PR 03-JUL-2002; 2002US-0393924P.
PR
PR 29-AUG-2002; 2002US-0406784P.
PR
PR 05-SEP-2002; 2002US-0408378P.
PR
PR 09-SEP-2002; 2002US-0409293P.
PR
PR 19-SEP-2002; 2002US-00251117.
PR
PR 21-OCT-2002; 2002US-00277494.
PR
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
PI
XX WPI; 2003-697612/66.
DR
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of the epidermal growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1048; 171pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of one or more human epidermal growth factor
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of EGFR genes in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating a wide range of cancers such as breast and ovarian cancer. The
CC siNAs are also useful for drug screening, diagnosis, therapeutic target
CC identification and validation, genetic engineering, pharmacogenomics,
CC studying gene function, and gene mapping (e.g., of single nucleotide
CC polymorphisms). The present sequence represents the lower strand of a
CC human HER1 (EGFR)-targeted double-stranded siNA.
XX
SQ Sequence 19 BP; 2 A; 7 C; 7 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1627 GGCCCCAGCAGGCAG 1641
||||| |||||||
Db 18 GGCCCCAGCAGGCAG 4
RESULT 2251
ADL79218/C
ID ADL79218 standard; RNA; 19 BP.
XX
AC ADL79218;
XX
XX 20-MAY-2004 (first entry)
DT
XX Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:383.
DE
XX RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
KW HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.

```
XX OS Homo sapiens.
XX PN WO2003070912-A2.
XX XX
XX PD 28-AUG-2003.
XX XX
XX PF 20-FEB-2003; 2003WO-US005045.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 03-JUL-2002; 2002US-0393924P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 19-SEP-2002; 2002US-00251117.
XX PR 21-OCT-2002; 2002US-00277494.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX XX
XX XX WPI; 2003-697612/66.
XX XX
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of the epidermal growth
XX PT factor receptor gene.
XX XX
XX PS Example 3; SEQ ID NO 383; 171pp; English.
XX XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of one or more human epidermal growth factor
XX CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of EGFR genes in cells, tissue explants or
XX CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX CC for the treatment of a variety of conditions. They may be used for
XX CC treating a wide range of cancers such as breast and ovarian cancer. The
XX CC siNAs are also useful for drug screening, diagnosis, therapeutic target
XX CC identification and validation, genetic engineering, pharmacogenomics,
XX CC studying gene function, and gene mapping (e.g., of single nucleotide
XX CC polymorphisms). The present sequence represents the lower strand of a
XX CC HER2 (EGFR2)-targeted double-stranded siNA.
XX XX
XX SQ Sequence 19 BP; 4 A; 8 C; 2 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 356 CTGATGGGAGAGTG 370
XX |||||||||
XX Db 18 CTGATGGGAGAGTG 4
XX
XX RESULT 2252
XX ADL79576
XX ID ADL79576 standard; RNA; 19 BP.
XX XX
XX AC ADL79576;
```

```
XX XX
XX DT 20-MAY-2004 (first entry)
XX DE Human HER1 (EGFR) transcript target sequence/siNA upper strand, SEQ:741.
XX XX
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX KW short hairpin RNA; shRNA; expression modulation; Gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping; cancer;
XX KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX KW HER1; C-erb-B-1; target sequence; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO2003070912-A2.
XX XX
XX PD 28-AUG-2003.
XX XX
XX PF 20-FEB-2003; 2003WO-US005045.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 03-JUL-2002; 2002US-0393924P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 19-SEP-2002; 2002US-00251117.
XX PR 21-OCT-2002; 2002US-00277494.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX XX
XX XX WPI; 2003-697612/66.
XX XX
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of the epidermal growth
XX PT factor receptor gene.
XX XX
XX PS Example 3; SEQ ID NO 741; 171pp; English.
XX XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of one or more human epidermal growth factor
XX CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of EGFR genes in cells, tissue explants or
XX CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX CC for the treatment of a variety of conditions. They may be used for
XX CC treating a wide range of cancers such as breast and ovarian cancer. The
XX CC siNAs are also useful for drug screening, diagnosis, therapeutic target
XX CC identification and validation, genetic engineering, pharmacogenomics,
XX CC studying gene function, and gene mapping (e.g., of single nucleotide
XX CC polymorphisms). The present sequence represents the upper strand of a
XX CC human HER1 (EGFR) targeted double-stranded siNA, which is identical to
XX CC the HER1 transcript target sequence.
XX XX
XX SQ Sequence 19 BP; 3 A; 7 C; 7 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 19;
```

Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1627 GGCCCCCAGCAGCAG 1641
| | | | | | | | | | | | | | | |
Db 2 GGCCCCCAGCAGCGC 16

RESULT 2253
ADL78969
ID ADL78969 standard; RNA; 19 BP.
XX
AC ADL78969;
XX
XX
XX
XX 20-MAY-2004 (first entry)
XX
DE Human HER2 (EGFR2) transcript target sequence/siRNA upper strand, SEQ:134.
XX
XX RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
KW HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.
XX
XX Homo sapiens.
XX
XX
XX WO2003070912-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005045.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US016840.
PR 06-JUN-2002; 2002US-00163552.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393924P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 19-SEP-2002; 2002US-00251117.
PR 21-OCT-2002; 2002US-00277494.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
XX
XX WPI; 2003-697612/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of the epidermal growth
PT factor receptor gene.
XX
XX
XX Example 3; SEQ ID NO 134; 171pp; English.

The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of one or more human epidermal growth factor
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of EGFR genes in cells, tissue explants or

organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating a wide range of cancers such as breast and ovarian cancer. The
CC siNAs are also useful for drug screening, diagnosis, therapeutic target
CC identification and validation, genetic engineering, pharmacogenomics,
CC studying gene function, and gene mapping (e.g., of single nucleotide
CC polymorphisms). The present sequence represents the upper strand of a
CC human HER2 (EGFR2)-targeted double-stranded siNA, which is identical to
CC the HER2 transcript target sequence.

XX
SQ Sequence 19 BP; 5 A; 2 C; 8 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTG 370
| | | | | | | | | | | | | | | |
Db 2 CUGAUGGGGAGAAUG 16

RESULT 2254
ADN34266/c
ID ADN34266 standard; RNA; 19 BP.
XX
XX
XX AC ADN34266;
XX
XX
XX 01-JUL-2004 (first entry)
XX
XX Lower strand of cyclin D1 targeted double stranded siNA #47.
XX
XX short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW cancer; cell-proliferation disorder; restenosis; drug screening;
KW genetic engineering; pharmacogenomics; gene mapping;
KW single nucleotide polymorphisms; ss.
XX
XX Homo sapiens.
XX
XX WO2003072705-A2.
XX
XX 04-SEP-2003.
XX
XX 06-FEB-2003; 2003WO-US003662.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson J, Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689983/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
XX Example 3; SEQ ID NO 286; 144pp; English.

The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence

CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 236 GTGGTGGCGGACGTG 250
Db 19 GTGGTGGCGGACGTG 5
RESULT 2255
ADN34027
ID ADN34027 standard; RNA; 19 BP.
XX
AC ADN34027;
XX
DT 01-JUL-2004 (first entry)
XX
DE Upper strand of cyclin D1 targeted double stranded siNA #47.
XX
KW short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW cancer; cell-proliferation disorder; restenosis; drug screening;
KW genetic engineering; pharmacogenomics; gene mapping;
KW single nucleotide polymorphisms; ss.
XX
OS Homo sapiens.
XX
PN WO2003072705-A2.
XX
PD 04-SEP-2003.
XX
PF 06-FEB-2003; 2003WO-US0003662.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson J, Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689983/65.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
PS Example 3; SEQ ID NO 47; 144pp; English.
XX
CC The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the upper strand of cyclin D1 targeted double stranded siNA
CC which is identical to the cyclin D1 transcript target sequence.
XX
SQ Sequence 19 BP; 3 A; 4 C; 9 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 275 CTGCTCTCTGGGGAAC 289
Db 19 CTGCTCTCTGGGGAAC 5
RESULT 2257
ADN34016

QY 236 GTGGTGGCGGACGTG 250
Db 1 GUGGUGGCCGACGUG 15
RESULT 2256
ADN34255/c
ID ADN34255 standard; RNA; 19 BP.
XX
AC ADN34255;
XX
DT 01-JUL-2004 (first entry)
XX
DE Lower strand of cyclin D1 targeted double stranded siNA #36.
XX
KW short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW cancer; cell-proliferation disorder; restenosis; drug screening;
KW genetic engineering; pharmacogenomics; gene mapping;
KW single nucleotide polymorphisms; ss.
XX
OS Homo sapiens.
XX
PN WO2003072705-A2.
XX
PD 04-SEP-2003.
XX
PF 06-FEB-2003; 2003WO-US0003662.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson J, Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689983/65.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
PS Example 3; SEQ ID NO 275; 144pp; English.
XX
CC The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 4 A; 5 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 275 CTGCTCTCTGGGGAAC 289
Db 19 CTGCTCTCTGGGGAAC 5
RESULT 2257
ADN34016


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ID  ADN34016 standard; RNA; 19 BP.
XX  AC  ADN34016;
XX  DT  01-JUL-2004 (first entry)
XX  DE  Upper strand of cyclin D1 targeted double stranded siNA #36.
XX  KW  short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
KW  cancer; cell-proliferation disorder; restenosis; drug screening;
KW  genetic engineering; pharmacogenomics; gene mapping;
XX  KW  single nucleotide polymorphisms; ss.
XX  OS  Homo sapiens.
XX  PN  WO2003072705-A2.
XX  PD  04-SEP-2003.
XX  PF  06-FEB-2003; 2003WO-US003662.
XX  PR  20-FEB-2002; 2002US-0358580P.
XX  PR  11-MAR-2002; 2002US-0363124P.
XX  PR  06-JUN-2002; 2002US-0386782P.
XX  PR  29-AUG-2002; 2002US-0406784P.
XX  PR  05-SEP-2002; 2002US-0408378P.
XX  PR  09-SEP-2002; 2002US-0409293P.
XX  PR  17-SEP-2002; 2002US-0411273P.
XX  PR  15-JAN-2003; 2003US-0440129P.
XX  PA  (RIBO-) RIBOZYME PHARM INC.
XX  PI  Thompson J, Mcswiggen J, Beigelman L;
XX  WPI; 2003-689983/65.
XX  DR  New short interfering nucleic acid, useful e.g. for treatment and
XX  PT  diagnosis of cancer and restenosis, down regulates expression of at least
XX  PT  one cyclin gene.
XX  PS  Example 3; SEQ ID NO 36; 144pp; English.
XX  CC  The present invention relates to a short interfering nucleic acid (siNA)
XX  CC  that down regulates expression of at least one cyclin gene by RNA
XX  CC  interference. siNA are used to modulate expression of cyclin genes, in
XX  CC  cells, tissue explants or organisms, e.g. for treating a wide range of
XX  CC  cancers and other cell-proliferation disorders such as restenosis, but
XX  CC  also for drug screening, diagnosis, target identification and validation;
XX  CC  genetic engineering, pharmacogenomics, studying gene function and gene
XX  CC  mapping (e.g. of single-nucleotide polymorphisms). The present sequence
XX  CC  represents the upper strand of cyclin D1 targeted double stranded siNA
XX  CC  which is identical to the cyclin D1 transcript target sequence.
XX  SQ  Sequence 19 BP; 4 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY  275 CTGCTCTCTGGGGAAC 289
DB  1 CUGCUCCUGGUGAAC 15

RESULT 2258
ADM69520
ID  ADM69520 standard; DNA; 19 BP.
XX  AC  ADM69520;
XX  DT  03-JUN-2004 (first entry)
XX  DE  Plant gene polymorphism marker related primer, SEQ ID 399.

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XX  KW  Primer; variation mapping; mutation mapping; plant;
XX  KW  gene polymorphism marker; ss.
XX  OS  Synthetic.
XX  PN  JP2003289885-A.
XX  PD  14-OCT-2003.
XX  PF  31-JAN-2003; 2003JP-00024620.
XX  PR  01-FEB-2002; 2002JP-00025338.
XX  PA  (RIKA ) RIKAGAKU KENKYUSHO.
XX  PA  (SAIM-) SAI MEDIA KK.
XX  PA  (MATS/) MATSUI M.
XX  PA  (NAKA/) NAKAZAWA M.
XX  DR  WPI; 2004-126231/13.
XX  PT  A primer set and method useful for mapping at least the
XX  PT  variation/mutation part of a plant gene using a gene polymorphism marker.
XX  PS  Claim 7; SEQ ID NO 399; 120pp; Japanese.
XX  CC  The present invention relates to a primer set and method for mapping at
XX  CC  least the variation/mutation part of a plant gene using a gene
XX  CC  polymorphism marker. A mutation site of the plant gene is mapped by
XX  CC  utilizing a genetic polymorphism marker as follows: (a) genomic DNA is
XX  CC  prepared from a plant homozygously having a mutation to be an object of
XX  CC  the mapping; (b) A forward primer 1 containing a base corresponding to
XX  CC  the gene polymorphic marker of one ecotype plant, a forward primer 2
XX  CC  containing a base corresponding to the genetic polymorphism of the other
XX  CC  ecotype plant and a reverse primer 3 based on the base sequence common
XX  CC  with both the ecotype plants are prepared; (c) two kinds of
XX  CC  oligonucleotides emitting fluorescence of different colors when the
XX  CC  genetic polymorphism marker is detected are prepared; (d) an
XX  CC  amplification reaction of the genomic DNA is carried out in the presence
XX  CC  of the primers 1, 2 and 3 and the two kinds of the oligonucleotides; (e)
XX  CC  the fluorescence intensity emitted from the resultant reaction product
XX  CC  is detected and (f) the position on the genome of the mutation site is
XX  CC  determined from the results of detection. The present sequence is a
XX  CC  primer, used to illustrate the invention.
XX  SQ  Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match          0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1239 CTTCAATCTTCGGTAT 1253
DB  5 CTTCAATCTTCGGTAT 19

RESULT 2259
ADN75530
ID  ADN75530 standard; RNA; 19 BP.
XX  AC  ADN75530;
XX  DT  01-JUL-2004 (first entry)
XX  DE  Human CDC25B CR region siRNA oligonucleotide SEQ ID 355.
XX  KW  small interfering RNA; siRNA; protein-tyrosine-phosphatase; PTP;
XX  KW  cytosstatic; immunomodulator; antimicrobial; antiinflammatory;
XX  KW  antidiabetic; anorectic; cancer; autoimmune disease; infection;
XX  KW  inflammation; diabetes; obesity; RNA interference; gene silencing; ss.
XX  OS  Homo sapiens.

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PN WO2004016735-A2.
XX
PD 26-FEB-2004.
XX
XX 23-MAY-2003; 2003WO-US016632.
XX
XX 23-MAY-2002; 2002US-0383249P.
PR
PR 14-APR-2003; 2003US-0462942P.
XX
XX (CEPT-) CEPTYR INC.
PA (COLD-) COLD SPRING HARBOR LAB.
XX
XX Klinghoffer R, Lewis SP, Tonks NK, Meng T;
XX
XX WPI; 2004-203773/19.
XX
XX New isolated small interfering RNA (siRNA) polynucleotide useful for
PT treating diseases with aberrant activity of the protein tyrosine
PT phosphatase, such as cancer, autoimmune disease, infection, inflammation,
PT diabetes and obesity.
XX
XX Example 2; SEQ ID NO 355; 392pp; English.
XX
XX This invention describes novel small interfering RNA (siRNA)
CC polynucleotides capable of interfering with expression of a polypeptide
CC having protein-tyrosine-phosphatase (pnp) activity. The products of the
CC invention have cytostatic, immunomodulator, antimicrobial,
CC antiinflammatory, antidiabetic and anorectic activity. The methods and
CC compositions of the present invention are useful for treating diseases or
CC conditions associated with aberrant expression or activity of the protein
CC tyrosine phosphatase, such as cancer, autoimmune diseases, infection,
CC inflammation, diabetes and obesity. This sequence represents a siRNA
CC directed against dual specificity phosphatase (DSP) expression.
XX
XX Sequence 19 BP; 8 A; 6 C; 3 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 86.7%; Pred. No. 1.2e+03;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 973 CACCGAGACCTCAAG 987
Db 3 CACCGAGACCTCAAG 17
|||||:|||||
RESULT 2260
ADN36944
ID ADN36944 standard; DNA; 19 BP.
XX
AC ADN36944;
XX
XX 15-JUL-2004 (first entry)
DT
XX
XX Primer used to sequence Tn5 insertional site in X. albolineans XALB1.
DE
XX
XX Albicidin family; antibiotic production; biosynthetic gene cluster;
KW XALB1; albidin biosynthetic gene cluster 1; phytotoxic damage; Tn5;
KW sequencing; primer; ss.
XX
XX Unidentified.
OS
XX
XX WO2004035760-A2.
PN
XX
XX 29-APR-2004.
PD
XX
XX 17-OCT-2003; 2003WO-US033142.
PF
XX
XX 18-OCT-2002; 2002US-0419463P.
PR
XX
XX (UYFL) UNIV FLORIDA.
PA (CIRA-) CIRAD CENT COOP INT EN RECH AGRONOMIQUE.
XX
XX Royer M, Gabriel DW, Frutos R, Rott P;
PI

XX WPI; 2004-365158/34.
DR
XX
XX New transformed host cell, useful for producing antibiotics, preferably
PT polyketide antibiotics for protecting plants against phytotoxic damage,
PT or damage against albidin.
XX
XX Example 6; SEQ ID NO 52; 193pp; English.
PS
XX
XX The present invention relates to a novel Albicidin family of antibiotics
CC produced by the expression of biosynthetic gene clusters from Xanthomonas
CC albilineans designated as XALB1, XALB2 and XALB3 (albicidin biosynthetic
CC gene clusters 1, 2 and 3). The invention discloses the polynucleotide
CC sequences of these gene clusters, and the proteins encoded by the open
CC reading frames (ORFs) within the gene clusters. Also disclosed are
CC methods for producing an antibiotic and protecting a plant against damage
CC from albidin and against phytotoxic damage. The present sequence
CC represents a sequencing primer used in the examples of the present
CC invention.
XX
XX Sequence 19 BP; 3 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1187 TGCCACAGGCGTC 1201
Db 1 TGCCACAGGCGTC 15
|||||:|||||
RESULT 2261
ADO56525/C
ID ADO56525 standard; DNA; 19 BP.
XX
AC ADO56525;
XX
XX 12-AUG-2004 (first entry)
DT
XX
XX Human cyclin-dependent kinase 10, CDK10 proximal SNP probe #50.
DE
XX
XX gene therapy; human; ss; melanoma;
KW melanoma associated polymorphic variation; SNP;
KW single nucleotide polymorphism; cyclin-dependent kinase 10; CDK10; probe.
XX
XX Homo sapiens.
OS
XX
XX WO2004044164-A2.
PN
XX
XX 27-MAY-2004.
PD
XX
XX 06-NOV-2003; 2003WO-US035879.
PF
XX
XX 06-NOV-2002; 2002US-0424475P.
PR
PR 23-JUL-2003; 2003US-0489703P.
XX
XX (SEQU-) SEQUENOM INC.
PA
XX
XX Roth RB, Nelson MR, Braun A, Kammerer SM;
PI
XX
XX WPI; 2004-411721/38.
DR
XX
XX Identifying a subject at risk of melanoma, useful for treating melanoma,
PT comprises detecting the presence or absence of one or more polymorphic
PT variations associated with melanoma in a nucleic acid sample from a
PT subject.
XX
XX Example 5; Page 84; 295pp; English.
PS
XX
XX The invention relates to a method of identifying a subject at risk of
CC melanoma comprising detecting the presence or absence of one or more
CC polymorphic variations associated with melanoma in a nucleic acid sample
CC from a subject. Preventing melanoma in a subject comprises detecting the

CC presence or absence of one or more polymorphic variations associated with
CC melanoma in a nucleic acid sample from a subject; and administering a
CC melanoma preventative to a subject in need thereof based upon the
CC presence or absence of the one or more polymorphic variations in the
CC nucleic acid sample. The preventative reduces ultraviolet (UV) light
CC exposure to the subject. The methods, nucleic acids, proteins, and
CC compositions are useful for treating melanoma. The present sequence
CC represents a human cyclin-dependent kinase 10, CDK10, proximal SNP probe.

XX Sequence 19 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 1.2e+03;

Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1278 GTGGCCAGGCATCTCTGTC 1296

Db 19 DTGGCCTGGAAACCTGTCC 1

RESULT 2262

ADQ60469

ID ADQ60469 standard; RNA; 19 BP.

XX AC

XX ADQ60469;

XX 09-SEP-2004 (first entry)

XX DT

XX Anti-DBI siRNA DB 48 SEQ ID NO:168.

XX DE

XX ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;

XX RNA interference; DBI.

XX OS Synthetic.

XX PN WO2004045543-A2.

XX PD 03-JUN-2004.

XX 14-NOV-2003; 2003WO-US036787.

XX 14-NOV-2002; 2002US-0426137P.

XX 10-SEP-2003; 2003US-0502050P.

XX (DHAR-) DHARMA CON INC.

XX PA

XX Anastasia K, Angela R, Devin L, William M, Stephen S;

XX PI WPI; 2004-420527/39.

XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases

XX by selecting a target gene and measuring the functionality of the

XX nucleotide sequences that are complementary to a stretch of nucleotides

XX of the target sequence.

XX Example 1; SEQ ID NO 168; 199pp; English.

XX The invention relates to a novel method for selecting siRNA (short

XX interfering RNA) comprising selecting an siRNA molecule of 19-25

XX nucleoside bases by selecting a target gene and measuring the

XX functionality of sequences of 19-25 nucleotides in length that are

XX substantially complementary to a stretch of nucleotides of the target

XX sequence, where the functionality is dependent upon non-target specific

XX criteria. Also claimed are methods for gene-silencing, developing an

XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved

XX functionality, selecting hyperfunctional siRNA, an siRNA molecule

XX effective at silencing Bcl-2, and a kit for gene silencing comprising the

XX siRNA. The siRNA molecule comprises a sequence substantially similar to a

XX sequence consisting of GGGAGAUGAUGAAGUACAU; GAAGUACUUCUGCAGUUAAG;

XX GUACGACACCGGAGUA; AGAUGAUGAUGAAGUACAU; UGAAGACUCUGCAGUUAAG;

XX CAGCGCCUCUGUUAAG; and GAAGACUCUGCAGUUAAG. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.

XX Sequence 19 BP; 9 A; 3 C; 5 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;

Best Local Similarity 80.0%; Pred. No. 1.2e+03;

Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATCAAA 1449

Db 5 GAAGAUGGCCAUGAAA 19

RESULT 2263

ADQ60471

ID ADQ60471 standard; RNA; 19 BP.

XX AC

XX ADQ60471;

XX 09-SEP-2004 (first entry)

XX DT

XX Anti-DBI siRNA DB 50 SEQ ID NO:170.

XX DE

XX ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;

XX RNA interference; DBI.

XX OS Synthetic.

XX PN WO2004045543-A2.

XX PD 03-JUN-2004.

XX 14-NOV-2003; 2003WO-US036787.

XX 14-NOV-2002; 2002US-0426137P.

XX 10-SEP-2003; 2003US-0502050P.

XX (DHAR-) DHARMA CON INC.

XX PA

XX Anastasia K, Angela R, Devin L, William M, Stephen S;

XX PI WPI; 2004-420527/39.

XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases

XX by selecting a target gene and measuring the functionality of the

XX nucleotide sequences that are complementary to a stretch of nucleotides

XX of the target sequence.

XX Example 1; SEQ ID NO 170; 199pp; English.

XX The invention relates to a novel method for selecting siRNA (short

XX interfering RNA) comprising selecting an siRNA molecule of 19-25

XX nucleoside bases by selecting a target gene and measuring the

XX functionality of sequences of 19-25 nucleotides in length that are

XX substantially complementary to a stretch of nucleotides of the target

XX sequence, where the functionality is dependent upon non-target specific

XX criteria. Also claimed are methods for gene-silencing, developing an

XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved

XX functionality, selecting hyperfunctional siRNA, an siRNA molecule

XX effective at silencing Bcl-2, and a kit for gene silencing comprising the

XX siRNA. The siRNA molecule comprises a sequence substantially similar to a

XX sequence consisting of GGGAGAUGAUGAAGUACAU; GAAGUACUUCUGCAGUUAAG;

XX GUACGACACCGGAGUA; AGAUGAUGAUGAAGUACAU; UGAAGACUCUGCAGUUAAG;

XX CAGCGCCUCUGUUAAG; and GAAGACUCUGCAGUUAAG. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

XX comprises a sense strand and an anti-sense strand. The siRNA molecule

```
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 8 A; 3 C; 6 G; 0 T; 2 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 80.0%; Pred. No. 1.2e+03;
    Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
    |||:||||:||||
    3 GAAGAUGCCAUGAAA 17

Db

RESULT 2264
ADQ60472
ID ADQ60472 standard; RNA; 19 BP.
XX
AC ADQ60472;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-DBI siRNA DB 51 SEQ ID NO:171.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
PI WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 171; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGUAGUGAUGAUGA; GAAGACUCUCUCAGUUU;
CC GUACGACACCCGGAGUA; AGAUGAUGAUGAUGAUGA; GAGAUGAUGAUGAUGA;
CC CAUGGCGCCUCUGUUGA; UCGGCGCCUCUGUUGA; GAAGACUCUCUCAGUUU;
CC GGAGUAGUGAUGAUGAUGA; and GAAGACUCUCUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
```

```
SQ Sequence 19 BP; 7 A; 3 C; 6 G; 0 T; 3 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
    Best Local Similarity 80.0%; Pred. No. 1.2e+03;
    Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
    |||:||||:||||
    2 GAAGAUGCCAUGAAA 16

Db

RESULT 2265
ADQ60470
ID ADQ60470 standard; RNA; 19 BP.
XX
AC ADQ60470;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-DBI siRNA DB 49 SEQ ID NO:169.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
PI WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 169; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGUAGUGAUGAUGA; GAAGACUCUCUCAGUUU;
CC GUACGACACCCGGAGUA; AGAUGAUGAUGAUGAUGA; GAGAUGAUGAUGAUGA;
CC CAUGGCGCCUCUGUUGA; UCGGCGCCUCUGUUGA; GAAGACUCUCUCAGUUU;
CC GGAGUAGUGAUGAUGAUGA; and GAAGACUCUCUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 9 A; 2 C; 6 G; 0 T; 2 U; 0 Other;
    Query Match      0.8%; Score 13.4; DB 1; Length 19;
```

```
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
DB 1111111111111111
4 GAAGAUGCCAUGAAA 18

RESULT 2266
ADQ60590/C
ID ADQ60590 standard; RNA; 19 BP.
XX
AC ADQ60590;
XX
XX 09-SEP-2004 (first entry)
XX
DE Anti-Firefly luciferase siRNA Luc 79 SEQ ID NO:289.
XX
XX ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; firefly; luciferase.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 289; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAGUGAUGAUGAUA; GAAGACUCCAUUAAG;
CC GUACGACACCGGGAUA; AGAUGAGUGAUGAUGAUA; GAAGACUCCUUCAGUUU;
CC CAUGGCCUUCUUGUA; UGGGCCUUCUUGUAUUU; GAGAUGAUGAUGAUGAUA;
CC GGAGAGUGAUGAUGAUA; and GAAGACUCCUUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 6 A; 2 C; 7 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
DB 1111111111111111
1 GAAGAUGCCAUGAAA 15
```

```
QY 1205 TCTTCCGGGTCCA 1219
DB 19 TCTTCCGGGTCCA 5

RESULT 2267
ADQ60473
ID ADQ60473 standard; RNA; 19 BP.
XX
AC ADQ60473;
XX
XX 09-SEP-2004 (first entry)
XX
DE Anti-DBI siRNA DB 52 SEQ ID NO:172.
XX
XX ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; DBI.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 172; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAGUGAUGAUGAUA; GAAGACUCCAUUAAG;
CC GUACGACACCGGGAUA; AGAUGAGUGAUGAUGAUA; GAAGACUCCUUCAGUUU;
CC CAUGGCCUUCUUGUA; UGGGCCUUCUUGUAUUU; GAGAUGAUGAUGAUGAUA;
CC GGAGAGUGAUGAUGAUA; and GAAGACUCCUUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 7 A; 3 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1435 GAGGATGCCATGAAA 1449
DB 1111111111111111
1 GAAGAUGCCAUGAAA 15
```

RESULT 2268
ADQ61918/c
ID ADQ61918 standard; RNA; 19 BP.
XX
AC ADQ61918;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-SLC26A1 siRNA SEQ ID NO:1620.
XX
KW ss: siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2003; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
XX Example 12; SEQ ID NO 1620; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGUAGUGAUGAGUA; GAAGUACUCCAUUUUAG;
CC GUACGACACCCGGGAUA; AGAUAGUAGUAGUAGUAU; UGAGACUCUGCCAGUUU;
CC GAUGGCGCCUUGUUUGA; UGCGGCCUCUGUUUGAUU; GAGAUAGUGUAGUAGUA;
CC GGAGUAGUGUAGUAGUA; and GAAGACUCUGCCAGUUUG. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 3 A; 6 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 927 CCAGCTGTCTCCGTGG 941
|||||
Db 15 CCAGCAGCTCCGTGG 1

RESULT 2269

AAL61769
ID AAL61769 standard; DNA; 20 BP.
XX
AC AAL61769;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204206.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crks; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crks). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

```
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1565 TGCCTGACTCAGGCA 1579
Db 4 TGCCTGAGTCAGGCA 18

RESULT 2270
ADH48267/C
ID ADH48267 standard; DNA; 20 BP.
XX AC ADH48267;
XX DT 25-MAR-2004 (first entry)
XX DE Human GRK6 DNA, antisense oligonucleotide #59.
XX KW Antisense therapy; human; G protein-coupled receptor kinase 6;
XX KW GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX KW uterine contractility; hypertension; aberrant haematopoiesis;
XX KW antiinflammatory; antiarthritic; antirheumatic; hypotensive;
XX KW phosphorothioate; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "This oligonucleotide has a phosphorothioate
FT FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT FT and 3' ends, which are 5 nucleotides in length at each
FT FT end. All cytidine residues are 5-methylcytidines".
XX XX
XX PN US2003228689-A1.
XX XX
XX PD 11-DEC-2003.
XX XX
XX PF 31-MAY-2002; 2002US-00159856.
XX PR 31-MAY-2002; 2002US-00159856.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX XX
XX DR WPI; 2004-052027/05.
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
XX PT for treating diabetes, drug addiction, uterine contractility and
XX PT hypertension.
XX PS Example 15; SEQ ID NO 69; 58pp; English.
XX XX
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
XX CC The antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridises with the nucleic acid and inhibits the expression
XX CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage, preferably a phosphorothioate linkage. It also comprises at
XX CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX CC sugar moiety. The antisense oligonucleotide further comprises at least
XX CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC rheumatoid arthritis, drug addiction, uterine contractility,
XX CC hypertension, and diseases or conditions arising from aberrant
XX CC haematopoiesis. The present sequence represents an antisense
XX CC oligonucleotide used in the examples of the present invention.
XX SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGC 1041
Db 15 CTGGCTGAGTTGGC 1

RESULT 2271
ADH48321
ID ADH48321 standard; DNA; 20 BP.
XX AC ADH48321;
XX DT 25-MAR-2004 (first entry)
XX DE Human GRK6 DNA target sequence #35.
XX KW Antisense therapy; human; G protein-coupled receptor kinase 6;
XX KW GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX KW uterine contractility; hypertension; aberrant haematopoiesis;
XX KW antiinflammatory; antiarthritic; antirheumatic; hypotensive; ds.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "This oligonucleotide has a phosphorothioate
FT FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT FT and 3' ends, which are 5 nucleotides in length at each
FT FT end. All cytidine residues are 5-methylcytidines".
XX XX
XX PN US2003228689-A1.
XX XX
XX PD 11-DEC-2003.
XX XX
XX PF 31-MAY-2002; 2002US-00159856.
XX PR 31-MAY-2002; 2002US-00159856.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Dobie KW;
XX XX
XX DR WPI; 2004-052027/05.
XX XX
XX PT New compounds, particularly antisense oligonucleotides targeted to a
XX PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
XX PT for treating diabetes, drug addiction, uterine contractility and
XX PT hypertension.
XX PS Example 15; SEQ ID NO 123; 58pp; English.
XX XX
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
XX CC The antisense compound comprises an antisense oligonucleotide that
XX CC specifically hybridises with the nucleic acid and inhibits the expression
XX CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX CC antisense oligonucleotide comprises at least one modified internucleoside
XX CC linkage, preferably a phosphorothioate linkage. It also comprises at
XX CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX CC sugar moiety. The antisense oligonucleotide further comprises at least
XX CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC rheumatoid arthritis, drug addiction, uterine contractility,
XX CC hypertension, and diseases or conditions arising from aberrant
XX CC haematopoiesis. The present sequence represents a human GRK6 DNA target
XX CC sequence for an antisense oligonucleotide.
XX SQ Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGC 1041
Db 6 CTGGCTGAGTTGGC 20
```

```
RESULT 2272
AAQ15414
ID AAQ15414 standard; DNA; 20 BP.
XX AC AAQ15414;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to mutant sequence #4 of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /note= "mutant TaqI site"
XX PN EP461496-A.
XX PD 18-DEC-1991.
XX PF 01-JUN-1991; 91EP-00108976.
XX PR 08-JUN-1990; 90EP-00110907.
XX PA (BEHW ) BEHRINGWERKE AG.
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX DR WPI; 1991-370527/51.
XX PS Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 970 CTACACGAGACCTC 984
Db ||||| ||||| |||||
5 CTACACGAGACCTC 19
RESULT 2273
AAQ15283
ID AAQ15283 standard; DNA; 20 BP.
XX AC AAQ15283;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to wild-type TaqI site of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
```

```
KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /label= TaqI_site
XX PN EP461496-A.
XX PD 18-DEC-1991.
XX PF 01-JUN-1991; 91EP-00108976.
XX PR 08-JUN-1990; 90EP-00110907.
XX PA (BEHW ) BEHRINGWERKE AG.
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX DR WPI; 1991-370527/51.
XX PS Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX CC This probe specifically hybridises to the wild-type TaqI restriction
XX CC corresponding to nucleotides 2508-2511 of human Ha-ras. It is used for
XX CC quantitative determination of a specific region of the c-Ha-ras following
XX CC PCR amplification with nested primers of the target sequence from cells
XX CC treated with the carcinogen ethylnitrosurea. A set of 12 probes are also
XX CC used in the plaque hybridisation which differ only in the sequence at the
XX CC TaqI site in order to detect the 12 possible base-pair mutations.
XX CC (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 970 CTACACGAGACCTC 984
Db ||||| ||||| |||||
5 CTACATCGAGACCTC 19
RESULT 2274
AAQ15416
ID AAQ15416 standard; DNA; 20 BP.
XX AC AAQ15416;
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX DE Probe to mutant sequence #6 of exon 3 of human c-Ha-ras gene.
XX DE DE
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /note= "mutant TaqI site"
XX PN EP461496-A.
XX
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PD 18-DEC-1991.
XX
PF 01-JUN-1991; 91EP-00108976.
XX
PR 08-JUN-1990; 90EP-00110907.
XX
PA (BEHW ) BEHRINGWERKE AG.
XX
PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
PI Pourzand C;
XX
DR WPI; 1991-370527/51.
XX
XX Quantitative determination of DNA sequences - contg. mutationally
PT eliminated restriction site(s), chain reaction using polymerase
PT amplification and elimination of wild-type sequences.
XX
PS Example 2; Page 9; 16pp; English.
XX
CC This is one of 12 probes which differ only in the sequence at the TaqI
CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
CC The "mutant" probes are used to detect the 12 possible base-pair
CC mutations potentially induced by treatment of cells with the carcinogen
CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 970 CTACACCGAGACCTC 984
Db 5 CTACACCGAGACCTC 19

RESULT 2275
AAQ48260
ID AAQ48260 standard; DNA; 20 BP.
XX
AC AAQ48260;
XX
DT 25-MAR-2003 (revised)
DT 16-FEB-1994 (first entry)
XX
DE Glucocerebrosidase gene intron 6 5' antisense PCR primer.
XX
KW Mutant; polymerase chain reaction; PvuII polymorphism; detection;
KW screening method; GC alleles; Gaucher's disease; amplification; ss.
XX
OS Synthetic.
XX
PN EP558257-A1.
XX
PD 01-SEP-1993.
XX
PF 23-FEB-1993; 93EP-00301301.
XX
PR 24-FEB-1992; 92US-00841652.
XX
XX (SCRI ) SCRIPPS RES INST.
PA Beutler E;
PI
XX
DR WPI; 1993-274677/35.
XX
XX Detection of Gaucher's disease - by screening DNA for a substitution of
PT adenine for guanine at position 1 of glucocerebrosidase gene intron 2.
XX
PS Example; Page 14; 42pp; English.
XX
CC The sequence is that of a 5' antisense PCR primer corresponding to a
CC region in the glucocerebrosidase gene exon 6 which was used in amplifying

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CC intron 6 in a PCR to assay the PvuII polymorphism. This method may be
CC used for screening humans to diagnose Gaucher's disease or a heterozygous
CC carrier state. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 189 CAAGACCAATGGTGC 203
Db 2 CAAGACCAATGGAGC 16

RESULT 2276
AAQ56208/c
ID AAQ56208 standard; DNA; 20 BP.
XX
AC AAQ56208;
XX
DT 30-AUG-1994 (first entry)
XX
DE pol amplification primer (Backward).
XX
KW HTLV-I; human T-lymphotropic virus; monoclonal antibody; amplification;
KW PCR; polymerase chain reaction; assay; diagnosis; kit; detection; ss.
XX
OS Synthetic.
XX
PN AU9341863-A.
XX
PD 13-JAN-1994.
XX
PF 09-JUL-1993; 93AU-00041863.
XX
PR 10-JUL-1992; 92AU-00003450.
XX
PA (MENZ-) MENZIES SCHOOL HEALTH RES.
XX
PI Kemp DJ, Bastian IB;
DR WPI; 1994-057700/08.
XX
PT Australian variant of HTLV-I - for developing diagnostic assays and
PT vaccines.
XX
PS Disclosure; Page 25; 43pp; English.
XX
CC The primers (AAQ56207-22) are used to amplify various target sequences of
CC a new specific HTLV-I variant. The virus can be used to develop vaccines
CC and diagnostic aids specific to Australian Aborigines
XX
SQ Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 868 CAGTACCTGGATGAC 882
Db 20 CAGTACATGGATGAC 6

RESULT 2277
AAV01136/c
ID AAV01136 standard; DNA; 20 BP.
XX
AC AAV01136;
XX
DT 23-MAR-1998 (first entry)
XX
DE c-RAF protooncogene PCR primer for universal mammalian STS's.

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XX PCR primer; polymerase chain reaction; amplification; UM-STS;
KW universal mammalian sequence tagged site; genomic map; clone; ss.
XX Synthetic.
OS WO9731012-A1.
PN 28-AUG-1997.
XX 18-FEB-1997; 97WO-US002403.
PF 22-FEB-1996; 96US-0012061P.
XX (UNMI ) UNIV MICHIGAN.
PA (UNMS ) UNIV MICHIGAN STATE.
XX Brewer GU, Venta PJ, Yuzbasiyan-Gurkan V;
PI WPI; 1997-435083/40.
XX New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX Claim 1; Page 9; 26pp; English.
XX The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-
CC tagged site (UM-STS) primers. The primers are used to develop genomic
CC maps, to isolate clones from libraries, to make cross-species comparisons
CC and to develop additional genetic markers. UM-STS allow genomic
CC comparisons to be made between more species
XX Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 453 CACTGAGGACATCAA 467
Db 18 CACTGAGGATATCAA 4

RESULT 2278
AAV01150/C
ID AAV01150 standard; DNA; 20 BP.
XX AAV01150;
AC 23-MAR-1998 (first entry)
DT Homeobox 7 PCR primer for universal mammalian STS's.
DE PCR primer; polymerase chain reaction; amplification; UM-STS;
KW universal mammalian sequence tagged site; genomic map; clone; ss.
XX Synthetic.
OS WO9731012-A1.
PN 28-AUG-1997.
XX 18-FEB-1997; 97WO-US002403.
PF 22-FEB-1996; 96US-0012061P.
XX (UNMI ) UNIV MICHIGAN.
PA (UNMS ) UNIV MICHIGAN STATE.
XX Brewer GU, Venta PJ, Yuzbasiyan-Gurkan V;
PI WPI; 1997-435083/40.
XX New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX Claim 1; Page 10; 26pp; English.
XX The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-
CC tagged site (UM-STS) primers. The primers are used to develop genomic
CC maps, to isolate clones from libraries, to make cross-species comparisons
CC and to develop additional genetic markers. UM-STS allow genomic
CC comparisons to be made between more species
XX Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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XX Brewer GU, Venta PJ, Yuzbasiyan-Gurkan V;
PI WPI; 1997-435083/40.
XX New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX Claim 1; Page 9; 26pp; English.
XX The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-
CC tagged site (UM-STS) primers. The primers are used to develop genomic
CC maps, to isolate clones from libraries, to make cross-species comparisons
CC and to develop additional genetic markers. UM-STS allow genomic
CC comparisons to be made between more species
XX Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 512 ACCTGGAGAGCTGA 526
Db 19 AGCTGGAGAGCTGA 5

RESULT 2279
AAV01194/C
ID AAV01194 standard; DNA; 20 BP.
XX AAV01194;
AC 23-MAR-1998 (first entry)
DT T-cell receptor beta PCR primer for universal mammalian STS's.
DE PCR primer; polymerase chain reaction; amplification; UM-STS;
KW universal mammalian sequence tagged site; genomic map; clone; ss.
XX Synthetic.
OS WO9731012-A1.
PN 28-AUG-1997.
XX 18-FEB-1997; 97WO-US002403.
PF 22-FEB-1996; 96US-0012061P.
XX (UNMI ) UNIV MICHIGAN.
PA (UNMS ) UNIV MICHIGAN STATE.
XX Brewer GU, Venta PJ, Yuzbasiyan-Gurkan V;
PI WPI; 1997-435083/40.
XX New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX Claim 1; Page 10; 26pp; English.
XX The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-

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CC tagged site (UM-STS) primers. The primers are used to develop genomic
 CC maps, to isolate clones from libraries, to make cross-species comparisons
 CC and to develop additional genetic markers. UM-STS allow genomic
 CC comparisons to be made between more species

XX Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1173 CATCTCTATGAGAT 1187
 |||||
 Db 16 CATCTCTATGAGAT 2

RESULT 2280
 AAT97944
 ID AAT97944 standard; DNA; 20 BP.

XX AAT97944;
 AC AAT97944;
 XX 13-MAR-1998 (first entry)

DT PCR primer 4 used to create a probe for huntingtin gene transcripts.
 DE Huntingtin gene; IT15 gene; Huntington's disease; trinucleotide repeat;
 KW neurodegenerative disorder; HD; gene therapy; PCR primer; ds.
 XX Synthetic.

OS Homo sapiens.
 OS US5686288-A.
 PN 11-NOV-1997.

PD 20-MAY-1994; 94US-00246982.

PF 05-MAR-1993; 93US-00027498.

PR 01-JUL-1993; 93US-00085000.

XX (GEO) GEN HOSPITAL CORP.

XX Duyao MP, Gusella JF, Macdonald ME, Ambrose CM;

XX WPI; 1997-558144/51.

DR Nucleic acid encoding huntingtin protein - useful for gene therapy of
 XX Huntington's disease.

PS Disclosure; Col 8; 112pp; English.

XX PCR primers AAT97941-42 were used to create a 210 bp probe for
 CC transcripts of a novel gene, termed huntingtin or Irl5. The huntingtin
 CC reading frame contains a polymorphic (CAG)n trinucleotide repeat with at
 CC least 17 alleles in the normal population, varying from about 11 to 34
 CC CAG copies. Huntington's disease (HD) is a progressive neurodegenerative
 CC disorder characterised by motor disturbance, cognitive loss and
 CC psychiatric manifestations. The genetic defect causing HD is assigned to
 CC chromosome 4. On HD chromosomes, the length of the trinucleotide CAG
 CC repeat is substantially increased, e.g. about 37 to at least 73 copies.
 CC The huntingtin gene and proteins encoded by it, may be used for the
 CC diagnosis or treatment of Huntington's disease. The huntingtin gene is
 CC especially used in gene therapy of a symptomatic or presymptomatic
 CC patient. The method comprises providing a functional huntingtin gene with
 CC a (CAG)n repeat of the normal range of 11-34 copies, or an antisense
 CC sequence, to the desired cells of the patient, in a manner that permits
 CC the expression of the huntingtin protein provided by the gene, or
 CC inhibits expression of the mutated huntingtin gene, for a time and in a
 CC quantity sufficient to provide the huntingtin function to the cells of
 CC the patient

XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 340 GACTTGAAGATGGG 354
 |||||
 Db 3 GACTTGAAGATGTGG 17

RESULT 2281
 AAT68356/c
 ID AAT68356 standard; DNA; 20 BP.

XX AAT68356;
 AC AAT68356;
 XX 11-AUG-1997 (first entry)

DT Loci-specific primer for assessing integrity of human Y chromosome.
 DE Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
 XX polymerase chain reaction; fertility; azoospermia; oligospermia;
 KW infertile; diagnosis; DYS209; DYS210; DYS211; DYS33; DYS31; SMCX;
 KW DAZ(1); DYS218; DYS219; DYS212; DYS213; DYS214; DYS215; DYS216;
 KW DYS217; DYS218; DYS219; DYS220; DYS221; DYS222; DYS223; DYS224;
 KW DYS225; DYS226; DYS227; DYS228; DYS229; DYS230; DYS231; DYS232;
 KW DYS233; DYS234; DYS235; DYS236; DYS237; DYS238; DYS239; DYS240;
 KW DYS241; DYS242; DYS243; DYS244; DYS245; DYS246; DYS247; DYS248;
 KW DYS249; DYS250; DYS251; DYS252; DYS253; DYS254; DYS255; DYS256;
 KW DYS257; DYS258; DYS259; DYS260; DYS261; DYS262; DYS263; DYS264;
 KW DYS265; DYS266; DYS267; DYS268; DYS269; DYS270; DYS271; DYS272;
 KW DYS273; DYS274; DYS275; DYS276; DYS277; DYS278; DYS279; DYS280;
 KW DYS281; DYS282; DYS283; DYS284; DYS285; DYS286; DYS287; DYS288;
 KW DYS289; DYS290; DYS291; DYS292; DYS293; DYS294; DYS295; DYS296;
 KW DYS297; DYS298; DYS299; DYS300; DYS301; DYS302; DYS303; DYS304;
 KW DYS305; DYS306; DYS307; DYS308; DYS309; DYS310; DYS311; DYS312;
 KW DYS313; DYS314; DYS315; DYS316; DYS317; DYS318; DYS319; DYS320;
 KW DYS321; DYS322; DYS323; DYS324; DYS325; DYS326; DYS327; DYS328;
 KW DYS329; DYS330; DYS331; DYS332; DYS333; DYS334; DYS335; DYS336;
 KW DYS337; DYS338; DYS339; DYS340; DYS341; DYS342; DYS343; DYS344;
 KW DYS345; DYS346; DYS347; DYS348; DYS349; DYS350; DYS351; DYS352;
 KW DYS353; DYS354; DYS355; DYS356; DYS357; DYS358; DYS359; DYS360;
 KW DYS361; DYS362; DYS363; DYS364; DYS365; DYS366; DYS367; DYS368;
 KW DYS369; DYS370; DYS371; DYS372; DYS373; DYS374; DYS375; DYS376;
 KW DYS377; DYS378; DYS379; DYS380; DYS381; DYS382; DYS383; DYS384;
 KW DYS385; DYS386; DYS387; DYS388; DYS389; DYS390; DYS391; DYS392;
 KW DYS393; DYS394; DYS395; DYS396; DYS397; DYS398; DYS399; DYS400;
 KW DYS401; DYS402; DYS403; DYS404; DYS405; DYS406; DYS407; DYS408;
 KW DYS409; DYS410; DYS411; DYS412; DYS413; DYS414; DYS415; DYS416;
 KW DYS417; DYS418; DYS419; DYS420; DYS421; DYS422; DYS423; DYS424;
 KW DYS425; DYS426; DYS427; DYS428; DYS429; DYS430; DYS431; DYS432;
 KW DYS433; DYS434; DYS435; DYS436; DYS437; DYS438; DYS439; DYS440;
 KW DYS441; DYS442; DYS443; DYS444; DYS445; DYS446; DYS447; DYS448;
 KW DYS449; DYS450; DYS451; DYS452; DYS453; DYS454; DYS455; DYS456;
 KW DYS457; DYS458; DYS459; DYS460; DYS461; DYS462; DYS463; DYS464;
 KW DYS465; DYS466; DYS467; DYS468; DYS469; DYS470; DYS471; DYS472;
 KW DYS473; DYS474; DYS475; DYS476; DYS477; DYS478; DYS479; DYS480;
 KW DYS481; DYS482; DYS483; DYS484; DYS485; DYS486; DYS487; DYS488;
 KW DYS489; DYS490; DYS491; DYS492; DYS493; DYS494; DYS495; DYS496;
 KW DYS497; DYS498; DYS499; DYS500; DYS501; DYS502; DYS503; DYS504;
 KW DYS505; DYS506; DYS507; DYS508; DYS509; DYS510; DYS511; DYS512;
 KW DYS513; DYS514; DYS515; DYS516; DYS517; DYS518; DYS519; DYS520;
 KW DYS521; DYS522; DYS523; DYS524; DYS525; DYS526; DYS527; DYS528;
 KW DYS529; DYS530; DYS531; DYS532; DYS533; DYS534; DYS535; DYS536;
 KW DYS537; DYS538; DYS539; DYS540; DYS541; DYS542; DYS543; DYS544;
 KW DYS545; DYS546; DYS547; DYS548; DYS549; DYS550; DYS551; DYS552;
 KW DYS553; DYS554; DYS555; DYS556; DYS557; DYS558; DYS559; DYS560;
 KW DYS561; DYS562; DYS563; DYS564; DYS565; DYS566; DYS567; DYS568;
 KW DYS569; DYS570; DYS571; DYS572; DYS573; DYS574; DYS575; DYS576;
 KW DYS577; DYS578; DYS579; DYS580; DYS581; DYS582; DYS583; DYS584;
 KW DYS585; DYS586; DYS587; DYS588; DYS589; DYS590; DYS591; DYS592;
 KW DYS593; DYS594; DYS595; DYS596; DYS597; DYS598; DYS599; DYS600;
 KW DYS601; DYS602; DYS603; DYS604; DYS605; DYS606; DYS607; DYS608;
 KW DYS609; DYS610; DYS611; DYS612; DYS613; DYS614; DYS615; DYS616;
 KW DYS617; DYS618; DYS619; DYS620; DYS621; DYS622; DYS623; DYS624;
 KW DYS625; DYS626; DYS627; DYS628; DYS629; DYS630; DYS631; DYS632;
 KW DYS633; DYS634; DYS635; DYS636; DYS637; DYS638; DYS639; DYS640;
 KW DYS641; DYS642; DYS643; DYS644; DYS645; DYS646; DYS647; DYS648;
 KW DYS649; DYS650; DYS651; DYS652; DYS653; DYS654; DYS655; DYS656;
 KW DYS657; DYS658; DYS659; DYS660; DYS661; DYS662; DYS663; DYS664;
 KW DYS665; DYS666; DYS667; DYS668; DYS669; DYS670; DYS671; DYS672;
 KW DYS673; DYS674; DYS675; DYS676; DYS677; DYS678; DYS679; DYS680;
 KW DYS681; DYS682; DYS683; DYS684; DYS685; DYS686; DYS687; DYS688;
 KW DYS689; DYS690; DYS691; DYS692; DYS693; DYS694; DYS695; DYS696;
 KW DYS697; DYS698; DYS699; DYS700; DYS701; DYS702; DYS703; DYS704;
 KW DYS705; DYS706; DYS707; DYS708; DYS709; DYS710; DYS711; DYS712;
 KW DYS713; DYS714; DYS715; DYS716; DYS717; DYS718; DYS719; DYS720;
 KW DYS721; DYS722; DYS723; DYS724; DYS725; DYS726; DYS727; DYS728;
 KW DYS729; DYS730; DYS731; DYS732; DYS733; DYS734; DYS735; DYS736;
 KW DYS737; DYS738; DYS739; DYS740; DYS741; DYS742; DYS743; DYS744;
 KW DYS745; DYS746; DYS747; DYS748; DYS749; DYS750; DYS751; DYS752;
 KW DYS753; DYS754; DYS755; DYS756; DYS757; DYS758; DYS759; DYS760;
 KW DYS761; DYS762; DYS763; DYS764; DYS765; DYS766; DYS767; DYS768;
 KW DYS769; DYS770; DYS771; DYS772; DYS773; DYS774; DYS775; DYS776;
 KW DYS777; DYS778; DYS779; DYS780; DYS781; DYS782; DYS783; DYS784;
 KW DYS785; DYS786; DYS787; DYS788; DYS789; DYS790; DYS791; DYS792;
 KW DYS793; DYS794; DYS795; DYS796; DYS797; DYS798; DYS799; DYS800;
 KW DYS801; DYS802; DYS803; DYS804; DYS805; DYS806; DYS807; DYS808;
 KW DYS809; DYS810; DYS811; DYS812; DYS813; DYS814; DYS815; DYS816;
 KW DYS817; DYS818; DYS819; DYS820; DYS821; DYS822; DYS823; DYS824;
 KW DYS825; DYS826; DYS827; DYS828; DYS829; DYS830; DYS831; DYS832;
 KW DYS833; DYS834; DYS835; DYS836; DYS837; DYS838; DYS839; DYS840;
 KW DYS841; DYS842; DYS843; DYS844; DYS845; DYS846; DYS847; DYS848;
 KW DYS849; DYS850; DYS851; DYS852; DYS853; DYS854; DYS855; DYS856;
 KW DYS857; DYS858; DYS859; DYS860; DYS861; DYS862; DYS863; DYS864;
 KW DYS865; DYS866; DYS867; DYS868; DYS869; DYS870; DYS871; DYS872;
 KW DYS873; DYS874; DYS875; DYS876; DYS877; DYS878; DYS879; DYS880;
 KW DYS881; DYS882; DYS883; DYS884; DYS885; DYS886; DYS887; DYS888;
 KW DYS889; DYS890; DYS891; DYS892; DYS893; DYS894; DYS895; DYS896;
 KW DYS897; DYS898; DYS899; DYS900; DYS901; DYS902; DYS903; DYS904;
 KW DYS905; DYS906; DYS907; DYS908; DYS909; DYS910; DYS911; DYS912;
 KW DYS913; DYS914; DYS915; DYS916; DYS917; DYS918; DYS919; DYS920;
 KW DYS921; DYS922; DYS923; DYS924; DYS925; DYS926; DYS927; DYS928;
 KW DYS929; DYS930; DYS931; DYS932; DYS933; DYS934; DYS935; DYS936;
 KW DYS937; DYS938; DYS939; DYS940; DYS941; DYS942; DYS943; DYS944;
 KW DYS945; DYS946; DYS947; DYS948; DYS949; DYS950; DYS951; DYS952;
 KW DYS953; DYS954; DYS955; DYS956; DYS957; DYS958; DYS959; DYS960;
 KW DYS961; DYS962; DYS963; DYS964; DYS965; DYS966; DYS967; DYS968;
 KW DYS969; DYS970; DYS971; DYS972; DYS973; DYS974; DYS975; DYS976;
 KW DYS977; DYS978; DYS979; DYS980; DYS981; DYS982; DYS983; DYS984;
 KW DYS985; DYS986; DYS987; DYS988; DYS989; DYS990; DYS991; DYS992;
 KW DYS993; DYS994; DYS995; DYS996; DYS997; DYS998; DYS999; DYS1000;
 KW DYS1001; DYS1002; DYS1003; DYS1004; DYS1005; DYS1006; DYS1007; DYS1008;
 KW DYS1009; DYS1010; DYS1011; DYS1012; DYS1013; DYS1014; DYS1015; DYS1016;
 KW DYS1017; DYS1018; DYS1019; DYS1020; DYS1021; DYS1022; DYS1023; DYS1024;
 KW DYS1025; DYS1026; DYS1027; DYS1028; DYS1029; DYS1030; DYS1031; DYS1032;
 KW DYS1033; DYS1034; DYS1035; DYS1036; DYS1037; DYS1038; DYS1039; DYS1040;
 KW DYS1041; DYS1042; DYS1043; DYS1044; DYS1045; DYS1046; DYS1047; DYS1048;
 KW DYS1049; DYS1050; DYS1051; DYS1052; DYS1053; DYS1054; DYS1055; DYS1056;
 KW DYS1057; DYS1058; DYS1059; DYS1060; DYS1061; DYS1062; DYS1063; DYS1064;
 KW DYS1065; DYS1066; DYS1067; DYS1068; DYS1069; DYS1070; DYS1071; DYS1072;
 KW DYS1073; DYS1074; DYS1075; DYS1076; DYS1077; DYS1078; DYS1079; DYS1080;
 KW DYS1081; DYS1082; DYS1083; DYS1084; DYS1085; DYS1086; DYS1087; DYS1088;
 KW DYS1089; DYS1090; DYS1091; DYS1092; DYS1093; DYS1094; DYS1095; DYS1096;
 KW DYS1097; DYS1098; DYS1099; DYS1100; DYS1101; DYS1102; DYS1103; DYS1104;
 KW DYS1105; DYS1106; DYS1107; DYS1108; DYS1109; DYS1110; DYS1111; DYS1112;
 KW DYS1113; DYS1114; DYS1115; DYS1116; DYS1117; DYS1118; DYS1119; DYS1120;
 KW DYS1121; DYS1122; DYS1123; DYS1124; DYS1125; DYS1126; DYS1127; DYS1128;
 KW DYS1129; DYS1130; DYS1131; DYS1132; DYS1133; DYS1134; DYS1135; DYS1136;
 KW DYS1137; DYS1138; DYS1139; DYS1140; DYS1141; DYS1142; DYS1143; DYS1144;
 KW DYS1145; DYS1146; DYS1147; DYS1148; DYS1149; DYS1150; DYS1151; DYS1152;
 KW DYS1153; DYS1154; DYS1155; DYS1156; DYS1157; DYS1158; DYS1159; DYS1160;
 KW DYS1161; DYS1162; DYS1163; DYS1164; DYS1165; DYS1166; DYS1167; DYS1168;
 KW DYS1169; DYS1170; DYS1171; DYS1172; DYS1173; DYS1174; DYS1175; DYS1176;
 KW DYS1177; DYS1178; DYS1179; DYS1180; DYS1181; DYS1182; DYS1183; DYS1184;
 KW DYS1185; DYS1186; DYS1187; DYS1188; DYS1189; DYS1190; DYS1191; DYS1192;
 KW DYS1193; DYS1194; DYS1195; DYS1196; DYS1197; DYS1198; DYS1199; DYS1200;
 KW DYS1201; DYS1202; DYS1203; DYS1204; DYS1205; DYS1206; DYS1207; DYS1208;
 KW DYS1209; DYS1210; DYS1211; DYS1212; DYS1213; DYS1214; DYS1215; DYS1216;
 KW DYS1217; DYS1218; DYS1219; DYS1220; DYS1221; DYS1222; DYS1223; DYS1224;
 KW DYS1225; DYS1226; DYS1227; DYS1228; DYS1229; DYS1230; DYS1231; DYS1232;
 KW DYS1233; DYS1234; DYS1235; DYS1236; DYS1237; DYS1238; DYS1239; DYS1240;
 KW DYS1241; DYS1242; DYS1243; DYS1244; DYS1245; DYS1246; DYS1247; DYS1248;
 KW DYS1249; DYS1250; DYS1251; DYS1252; DYS1253; DYS1254; DYS1255; DYS1256;
 KW DYS1257; DYS1258; DYS1259; DYS1260; DYS1261; DYS1262; DYS1263; DYS1264;
 KW DYS1265; DYS1266; DYS1267; DYS1268; DYS1269; DYS1270; DYS1271; DYS1272;
 KW DYS1273; DYS1274; DYS1275; DYS1276; DYS1277; DYS1278; DYS1279; DYS1280;
 KW DYS1281; DYS1282; DYS1283; DYS1284; DYS1285; DYS1286; DYS1287; DYS1288;
 KW DYS1289; DYS1290; DYS1291; DYS1292; DYS1293; DYS1294; DYS1295; DYS1296;
 KW DYS1297; DYS1298; DYS1299; DYS1300; DYS1301; DYS1302; DYS1303; DYS1304;
 KW DYS1305; DYS1306; DYS1307; DYS1308; DYS1309; DYS1310; DYS1311; DYS1312;
 KW DYS1313; DYS1314; DYS1315; DYS1316; DYS1317; DYS1318; DYS1319; DYS1320;
 KW DYS1321; DYS1322; DYS1323; DYS1324; DYS1325; DYS1326; DYS1327; DYS1328;
 KW DYS1329; DYS1330; DYS1331; DYS1332; DYS1333; DYS1334; DYS1335; DYS1336;
 KW DYS1337; DYS1338; DYS1339; DYS1340; DYS1341; DYS1342; DYS1343; DYS1344;
 KW DYS1345; DYS1346; DYS1347; DYS1348; DYS1349; DYS1350; DYS1351; DYS1352;
 KW DYS1353; DYS1354; DYS1355; DYS1356; DYS1357; DYS1358; DYS1359; DYS1360;
 KW DYS1361; DYS1362; DYS1363; DYS1364; DYS1365; DYS1366; DYS1367; DYS1368;
 KW DYS1369; DYS1370; DYS1371; DYS1372; DYS1373; DYS1374; DYS1375; DYS1376;
 KW DYS1377; DYS1378; DYS1379; DYS1380; DYS1381; DYS1382; DYS1383; DYS1384;
 KW DYS1385; DYS1386; DYS1387; DYS1388; DYS1389; DYS1390; DYS1391; DYS1392;
 KW DYS1393; DYS1394; DYS1395; DYS1396; DYS1397; DYS1398; DYS1399; DYS1400;
 KW DYS1401; DYS1402; DYS1403; DYS1404; DYS1405; DYS1406; DYS1407; DYS1408;
 KW DYS1409; DYS1410; DYS1411; DYS1412; DYS1413; DYS1414; DYS1415; DYS1416;
 KW DYS1417; DYS1418; DYS1419; DYS1420; DYS1421; DYS1422; DYS1423; DYS1424;
 KW DYS1425; DYS1426; DYS1427; DYS1428; DYS1429; DYS1430; DYS1431; DYS1432;
 KW DYS1433; DYS1434; DYS1435; DYS1436; DYS1437; DYS1438; DYS1439; DYS1440;
 KW DYS1441; DYS1442; DYS1443; DYS1444; DYS1445; DYS1446; DYS1447; DYS1448;
 KW DYS1449; DYS1450; DYS1451; DYS1452; DYS1453; DYS1454; DYS1455; DYS1456;
 KW DYS1457; DYS1458; DYS1459; DYS1460; DYS1461; DYS1462; DYS1463; DYS1464;
 KW DYS1465; DYS1466; DYS1467; DYS1468; DYS1469; DYS1470; DYS1471; DYS1472;
 KW DYS1473; DYS1474; DYS1475; DYS1476; DYS1477; DYS1478; DYS1479; DYS1480;
 KW DYS1481; DYS1482; DYS1483; DYS1484; DYS1485; DYS1486; DYS1487; DYS1488;
 KW DYS1489; DYS1490; DYS1491; DYS1492; DYS1493; DYS1494; DYS1495; DYS1496;
 KW DYS1497; DYS1498; DYS1499; DYS1500; DYS1501; DYS1502; DYS1503; DYS1504;
 KW DYS1505; DYS1506; DYS1507; DYS1508; DYS1509; DYS1510; DYS1511; DYS1512;
 KW DYS1513; DYS1514; DYS1515; DYS1516; DYS1517; DYS1518; DYS1519; DYS1520;
 KW DYS1521; DYS1522; DYS1523; DYS1524; DYS1525; DYS1526; DYS1527; DYS1528;
 KW DYS1529; DYS1530; DYS1531; DYS1532; DYS1533; DYS1534; DYS1535; DYS1536;
 KW DYS1537; DYS1538; DYS1539; DYS1540; DYS1541; DYS1542; DYS1543; DYS1544;
 KW DYS1545; DYS1546; DYS1547; DYS1548; DYS1549; DYS1550; DYS1551; DYS1552;
 KW DYS1553; DYS1554; DYS1555; DYS1556; DYS1557; DYS1558; DYS1559; DYS1560;
 KW DYS1561; DYS1562; DYS1563; DYS1564; DYS1565; DYS1566; DYS1567; DYS1568;
 KW DYS1569; DYS1570; DYS1571; DYS1572; DYS1573; DYS1574; DYS1575; DYS1576;
 KW DYS1577; DYS1578; DYS1579; DYS1580; DYS1581; DYS1582; DYS1583; DYS1584;
 KW DYS1585; DYS1586; DYS1587; DYS1588; DYS1589; DYS1590; DYS1591; DYS1592;
 KW DYS1593; DYS1594; DYS1595; DYS1596; DYS1597; DYS1598; DYS1599; DYS1600;
 KW DYS1601; DYS1602; DYS1603; DYS1604; DYS1605; DYS1606; DYS1607; DYS1608;
 KW DYS1609; DYS1610; DYS1611; DYS1612; DYS1613; DYS1614; DYS1615; DYS1616;
 KW DYS1617; DYS1618; DYS1619; DYS1620; DYS1621; DYS1622; DYS1623; DYS1624;
 KW DYS1625; DYS1626; DYS1627; DYS1628; DYS1629; DYS1630; DYS1631; DYS1632;
 KW DYS1633; DYS1634; DYS1635; DYS1636; DYS1637; DYS1638; DYS1639; DYS1640;
 KW DYS1641; DYS1642; DYS1643; DYS1644; DYS1645; DYS1646; DYS1647; DYS

KW CNS disorder; PCR; primer; amplification.
 XX Synthetic.
 OS
 PN US5763174-A.
 XX
 PD 09-JUN-1998.
 XX
 XX 13-NOV-1995; 95US-00555678.
 PF
 PR 17-FEB-1994; 94US-00197794.
 PR 25-JUL-1994; 94US-00280443.
 PR 01-JUN-1995; 95US-00457459.
 XX
 PA (WIST-) WISTAR INST ANATOMY & BIOLOGY.
 XX
 PI Nishikura K;
 XX
 DR WPI; 1998-347307/30.
 XX
 XX Diagnosis of disorders characterised by inappropriate expression of
 PT enzyme - comprises contacting tissue sample with labelled antibodies,
 PT oligonucleotides or protein reagent and measuring association of enzyme.
 XX
 PS Example 10; Col 21; 66pp; English.
 XX
 CC The primers AAV27072-V27099 were used in the isolation, amplification and
 CC characterisation of double-stranded adenosine deaminase (DRADA). DRADA is
 CC specific for double-stranded RNA and is useful for the diagnosis of
 CC disorders characterised by inappropriate double-stranded ribonucleic acid
 CC adenosine deaminase expression. Particularly for diagnosis of certain
 CC neurological or CNS disorders, e.g. Alzheimer's disease, Huntington's
 CC disease, subacute sclerosing panencephalitis, measles inclusion body
 CC encephalitis or stroke, or other neurological conditions associated with
 CC aging. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 20 BP; 7 A; 1 C; 9 G; 3 T; 0 U; 0 Other;

 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 QY 377 CTTACGCCACGTCCT 391
 |||||
 Db 19 CTTACGCCACATCCT 5

 RESULT 2285
 AAV27081
 ID AAV27081 standard; DNA; 20 BP.
 XX
 AC AAV27081;
 XX
 DT 25-MAR-2003 (revised)
 DT 16-SEP-1998 (first entry)
 XX
 DE Primer YS.
 XX
 KW ss; Human; double-stranded adenosine deaminase; neurological disorder;
 KW CNS disorder; PCR; primer; amplification.
 XX
 OS Synthetic.
 XX
 PN US5763174-A.
 XX
 PD 09-JUN-1998.
 XX
 PF 13-NOV-1995; 95US-00555678.
 XX
 PR 17-FEB-1994; 94US-00197794.
 PR 25-JUL-1994; 94US-00280443.
 PR 01-JUN-1995; 95US-00457459.
 XX

PA (WIST-) WISTAR INST ANATOMY & BIOLOGY.
 XX
 PI Nishikura K;
 XX
 DR WPI; 1998-347307/30.
 XX
 XX Diagnosis of disorders characterised by inappropriate expression of
 PT enzyme - comprises contacting tissue sample with labelled antibodies,
 PT oligonucleotides or protein reagent and measuring association of enzyme.
 XX
 PS Example 10; Col 21; 66pp; English.
 XX
 CC The primers AAV27072-V27099 were used in the isolation, amplification and
 CC characterisation of double-stranded adenosine deaminase (DRADA). DRADA is
 CC specific for double-stranded RNA and is useful for the diagnosis of
 CC disorders characterised by inappropriate double-stranded ribonucleic acid
 CC adenosine deaminase expression. Particularly for diagnosis of certain
 CC neurological or CNS disorders, e.g. Alzheimer's disease, Huntington's
 CC disease, subacute sclerosing panencephalitis, measles inclusion body
 CC encephalitis or stroke, or other neurological conditions associated with
 CC aging. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 1 G; 7 T; 0 U; 0 Other;

 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 QY 377 CTTACGCCACGTCCT 391
 |||||
 Db 2 CTTACGCCACATCCT 16

 RESULT 2286
 AAV42487/c
 ID AAV42487 standard; DNA; 20 BP.
 XX
 AC AAV42487;
 XX
 DT 02-OCT-1998 (first entry)
 XX
 DE PCR primer 2 used to amplify human loci DY21 DNA.
 XX
 KW Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;
 KW deletion mutation; male infertility; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9824937-A2.
 XX
 PD 11-JUN-1998.
 XX
 PF 04-DEC-1997; 97WO-US023136.
 XX
 PR 04-DEC-1996; 96US-00753979.
 XX
 PA (PROM-) PROMEGA CORP.
 XX
 PI First MK, Muallem A;
 XX
 DR WPI; 1998-333352/29.
 XX
 PT Assessing Y chromosome integrity in predicting human male infertility -
 PT by amplifying specific regions of human Y chromosome linked to normal
 PT fertility by multiplex PCR and detecting deletion mutations.
 XX
 PS Claim 2; Page 30; 47pp; English.
 XX
 CC PCR primers AAV42472-511 are used in a method for assessing the integrity
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with
 CC several distinct oligonucleotide primer pairs capable of simultaneously
 CC priming several human Y chromosome loci which are linked to normal

CC fertility in human males. The present primer pair (AAV42486-87) amplify
 CC loci DY21. The primer pairs are amplified by multiplex PCR, yielding
 CC amplified chromosomal DNA fragments which are isolated and compared with
 CC those from normal male subjects. The method is useful to detect deletion
 CC mutations on a Y chromosome which are predictive of human male
 CC infertility

SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 18 ATGCACAGGATGCA 32
 ||||| ||||| |||||
 Db 19 ATGGAAGAAGTATGCA 5

RESULT 2287
 AAV42508
 ID AAV42508 standard; DNA; 20 BP.

AC AAV42508;

XX 02-OCT-1998 (first entry)

DE PCR primer 1 used to amplify human loci DYS215 DNA.

XX Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;
 KW deletion mutation; male infertility; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9824937-A2.

XX 11-JUN-1998.

XX 04-DEC-1997; 97WO-US023136.

XX 04-DEC-1996; 96US-00753979.

XX (PROM-) PROMEGA CORP.

PI First MK, Muallem A;

XX WPI; 1998-333352/29.

XX Assessing Y chromosome integrity in predicting human male infertility -
 PT by amplifying specific regions of human Y chromosome linked to normal
 PT fertility by multiplex PCR and detecting deletion mutations.

PS Claim 2; Page 37; 47pp; English.

XX PCR primers AAV42472-511 are used in a method for assessing the integrity
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with
 CC several distinct oligonucleotide primer pairs capable of simultaneously
 CC priming several human Y chromosome loci which are linked to normal
 CC fertility in human males. The present primer pair (AAV42508-09) amplify
 CC loci DYS215. The primer pairs are amplified by multiplex PCR, yielding
 CC amplified chromosomal DNA fragments which are isolated and compared with
 CC those from normal male subjects. The method is useful to detect deletion
 CC mutations on a Y chromosome which are predictive of human male
 CC infertility

XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1574 CAGGCAGCCAGCTT 1588
 ||||| ||||| |||||

Db 1 CAGGCAGGCAGCTT 15

RESULT 2288

AAV05848

ID AAV05848 standard; DNA; 20 BP.

XX AAV05848;

XX 01-JUN-1998 (first entry)

DE 3' primer for human huntingtin gene translocation probe.

KW Human; huntingtin gene; Huntington's disease; chromosome; marker; locus;
 KW antisense; gene therapy; diagnosis; primer; amplification; PCR; probe;
 KW hybridisation; translocation; ss.

XX Synthetic.

OS Homo sapiens.

XX US5693757-A.

XX 02-DEC-1997.

XX 30-MAY-1995; 95US-00453265.

XX 05-MAR-1993; 93US-00027498.

XX 01-JUL-1993; 93US-00085000.

XX 20-MAY-1994; 94US-00246982.

XX (GEO) GEN HOSPITAL CORP.

XX Gusella JF, Duyao MP, Ambrose CM, Macdonald MB;

XX WPI; 1998-031815/03.

XX Huntingtin protein and related nucleic acid - for diagnosis or therapy of
 XX Huntington's disease.

XX Disclosure; Col 8; 112pp; English.

XX Primers AAV05845-46 were used to amplify a 210 bp fragment of the human
 CC huntingtin gene (AAV05828) for the analysis of a translocation breakpoint
 CC at locus t(4;12), which disrupts the Huntington's disease (HD) gene. The
 CC huntingtin protein, or the gene encoding it, is useful for detecting a
 CC predisposition to develop HD, for diagnosis and treatment of HD,
 CC especially by antisense and gene therapy

XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 340 GACTTGAAGATGGG 354

||||| ||||| |||||
 Db 3 GACTTGAAGATGGG 17

RESULT 2289

AAV08608

ID AAV08608 standard; DNA; 20 BP.

XX AAV08608;

XX 15-FEB-1999 (first entry)

XX Primer ACE/184PB for human ACE gene.

KW PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen;
 KW cardiovascular status; AGT; AT1; type 1 angiotensin II receptor; stroke;
 KW polymorphic pattern; blood pressure; electrocardiographic profile;
 KW cardiac condition diagnosis; myocardial infarction; atherosclerosis;

KW hypertension; cardiovascular disease; ss.
XX Synthetic.
OS Homo sapiens.
XX
XX WO9845477-A2.
XX
XX 15-OCT-1998.
XX
XX 01-APR-1998; 98WO-IB000475.
XX
XX 04-APR-1997; 97US-0042930P.
XX
XX (EURO-) EURONA MEDICAL AB.
XX
XX Norberg LT, Andersson MK, Lindstroem PHR;
XX WPI; 1998-568361/48.
XX
XX Assessing cardiovascular status in humans by polymorphic analysis - of
PT genes for angiotensin converting enzyme, angiotensinogen and angiotensin
PT II receptor, used to diagnose predisposition to disease and to predict
PT effect of therapy.
XX
XX Example 1; Page 28; 71pp; English.
XX
XX This sequence represents a PCR primer for the human ACE (angiotensin
CC converting enzyme) gene, and can be used in the method of the invention.
CC The method is for assessing cardiovascular status in humans by
CC determining the sequence of at least one polymorphic site in the ACE
CC (angiotensin converting enzyme), AAT (angiotensinogen) and/or AT1 (type 1
CC angiotensin II receptor) genes, and comparing the polymorphic pattern
CC with that in patients with predetermined markers of status. The method is
CC used to assess blood pressure or electrocardiographic profile, to
CC diagnose a cardiac condition such as (silent) myocardial infarction (MI),
CC hypertension, atherosclerosis or stroke. They can also be used to predict
CC response to treatments with ACE inhibitors, angiotensin II receptor
CC antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,
CC etc. It is also used to identify susceptibility to cardiovascular
CC disease. Libraries of nucleic acids containing polymorphic positions in
CC the 3 genes, and libraries of targets corresponding to the peptides from
CC the genes are used to screen for cardiovascular agents. The nucleic acids
XX contained in the library can be used as source of probes
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1544 CCAGCCTTGGGTCTT 1558
Db ||||||| |||||
4 CCAGCCTTGGGTCTT 18
RESULT 2290
AAZ31321
ID AAZ31321 standard; DNA; 20 BP.
XX
XX AAZ31321;
XX
XX 24-JAN-2000 (first entry)
XX
XX CXCR4 gene inhibiting antisense oligo AS(s)-78.
XX
XX HIV cofactor inhibitor; HIV infection; CXCR4 gene; CCR5 gene;
KW drug composition; antisense; ss.
XX
XX Synthetic.
OS
XX WO9951751-A1.
XX
XX 14-OCT-1999.

XX
XX 01-APR-1999; 99WO-JF001722.
XX
XX 02-APR-1998; 98JP-00125452.
XX
XX (MARI-) MARINE BIO CO LTD.
XX
XX Takaku H, Yamamoto N, Kimura T, Takai K, Wada A;
XX WPI; 1999-620207/53.
XX
XX Antisense oligonucleotide-based HIV cofactor inhibitors, as drug
PT compositions for treatment of HIV infection.
XX
XX Claim 6; Page 17; 59pp; Japanese.
XX
XX The invention provides HIV cofactor inhibitors that contain
CC oligonucleotides with a base sequence complementary to the CXCR4 or CCR5
CC genes. Such inhibitors can be formulated into drug compositions for
CC prevention or treatment of HIV infection, with inhibition of expression
CC of CXCR4 or/and CCR5 gene. Sequences AAZ31307-362 represent antisense
CC oligonucleotides to the CXCR4 gene
XX
SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1378 GGGGCGGACCTCTC 1392
Db ||||||| |||||
6 GTGGCGGACCTCTC 20
RESULT 2291
AAZ05007
ID AAZ05007 standard; DNA; 20 BP.
XX
XX AAZ05007;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX 17-DEC-1997; 97FR-00016034.
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1735; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames

CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases

SQ Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 220 CTGGATGAGATGGT 234

|||||||

Db 1 CTGGATGATGGT 15

RESULT 2292

AAZ23146

ID AAX23146 standard; DNA; 20 BP.

XX

AC AAX23146;

XX

DT 11-JUN-1999 (first entry)

XX

DE Rat high/low molecular weight kininogen PCR primer #1.

XX

Kallikrein; rat; atrial natriuretic peptide; treatment; renal disorder;
 cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia;
 glomerulosclerotic lesion; renal failure; nephrotic syndrome; restenosis;
 diabetic nephropathy; cardiac hypertrophy; heart failure; angioplasty;
 myocardial infarction; cerebrovascular disorder; tubular regeneration;
 occlusive artery disorder; vascular smooth muscle cell growth;
 neointimal formation; blood vessel; kininogen; PCR primer; ss.

XX

OS Synthetic.

OS

Rattus sp.

XX

XX WO9912576-A2.

XX

PN 18-MAR-1999.

XX

PD 11-SEP-1998; 98WO-US019267.

XX

PF 11-SEP-1997; 97US-0058511P.

XX

PR (MUSC-) MUSC FOUND RES DEV.

XX

PA Chao L, Chao J;

XX

PI WPI; 1999-214919/18.

XX

DR Delivering tissue kallikrein and atrial natriuretic peptide to a cell -
 for prevention and treatment of non-hypertension-associated renal and
 cardiac disorders.

XX

PS Example 1; Page 63; 120pp; English.

XX

This invention describes a novel method for delivering tissue kallikrein
 and atrial natriuretic peptide to a cell which can be used in the
 treatment of non-hypertension-associated renal and cardiac disorders. Non
 treatment of non-hypertension-associated renal disorders include renal injury,
 hypertension-associated renal disorders include renal injury,
 nephrotoxicity, nonhypertension-associated renal disease, salt-induced
 renal damage, glomerulosclerotic lesions, tubular injury, drug-induced
 renal damage, chronic renal failure, nephrotic syndrome and diabetic
 nephropathy, and non-hypertension-associated cardiac disorders include
 cardiac hypertrophy, nonhypertension-associated cardiac disease, heart

CC failure after cardiac surgery, cardiac injury after myocardial
 CC infarction, myocardial ischemia, congestive heart failure and restenosis
 CC following angioplasty. The encoding nucleic acids can also be used for
 CC preventing and/or treating the following: cerebrovascular disorders,
 CC occlusive artery disorders e.g. restenosis, renal damage and/or renal
 CC injury caused by drug induced and/or salt-induced nephrotoxicity and
 CC chronic renal failure and inhibiting vascular smooth muscle cell growth
 CC and/or inhibiting neointimal formation in blood vessel and stimulating
 CC renal tubular regeneration and/or reversing pre-existing renal injury

SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 307 CCACCTCAGCTCTGCA 321

|||||||

Db 2 CCACCCAGCTCTGCA 16

RESULT 2293

AAZ23149

ID AAX23149 standard; DNA; 20 BP.

XX

AC AAX23149;

XX

DT 11-JUN-1999 (first entry)

XX

DE Rat T kininogen PCR primer #1.

XX

Kallikrein; rat; atrial natriuretic peptide; treatment; renal disorder;
 cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia;
 glomerulosclerotic lesion; renal failure; nephrotic syndrome; restenosis;
 diabetic nephropathy; cardiac hypertrophy; heart failure; angioplasty;
 myocardial infarction; cerebrovascular disorder; tubular regeneration;
 occlusive artery disorder; vascular smooth muscle cell growth;
 neointimal formation; blood vessel; T kininogen; PCR primer; ss.

XX

OS Synthetic.

OS

Rattus sp.

XX

XX WO9912576-A2.

XX

PN 18-MAR-1999.

XX

PD 11-SEP-1998; 98WO-US019267.

XX

PF 11-SEP-1997; 97US-0058511P.

XX

PR (MUSC-) MUSC FOUND RES DEV.

XX

PA Chao L, Chao J;

XX

PI WPI; 1999-214919/18.

XX

DR Delivering tissue kallikrein and atrial natriuretic peptide to a cell -
 for prevention and treatment of non-hypertension-associated renal and
 cardiac disorders.

XX

PS Example 1; Page 63; 120pp; English.

XX

This invention describes a novel method for delivering tissue kallikrein
 and atrial natriuretic peptide to a cell which can be used in the
 treatment of non-hypertension-associated renal and cardiac disorders. Non
 treatment of non-hypertension-associated renal disorders include renal injury,
 hypertension-associated renal disorders include renal injury,
 nephrotoxicity, nonhypertension-associated renal disease, salt-induced
 renal damage, glomerulosclerotic lesions, tubular injury, drug-induced
 renal damage, chronic renal failure, nephrotic syndrome and diabetic
 nephropathy, and non-hypertension-associated cardiac disorders include
 cardiac hypertrophy, nonhypertension-associated cardiac disease, heart
 failure after cardiac surgery, cardiac injury after myocardial
 infarction, myocardial ischemia, congestive heart failure and restenosis

CC following angioplasty. The encoding nucleic acids can also be used for
 CC preventing and or treating the following: cerebrovascular disorders,
 CC occlusive artery disorders e.g. restenosis, renal damage and/or renal
 CC injury caused by drug induced and/or salt-induced nephrotoxicity and
 CC chronic renal failure and inhibiting vascular smooth muscle cell growth
 CC and/or inhibiting neointimal formation in blood vessel and stimulating
 CC renal tubular regeneration and/or reversing pre-existing renal injury
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 307 CCACTCAGCTCTGCA 321
 |||||
 Db 2 CCACCCAGCTCTGCA 16

RESULT 2294
 AAX23551/c
 ID AAX23551 standard; DNA; 20 BP.

XX AC AAX23551;

XX DT 18-JUN-1999 (first entry)

XX DE Deletion sequence oligonucleotide 4.

XX KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
 XX KW probe; cellular adhesion modulator; cellular proliferation modulator;
 XX KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
 XX KW HIV; primer; ss.

XX OS Synthetic.

XX FN WO9911820-A1.

XX PD 11-MAR-1999.

XX PF 01-SEP-1998; 98WO-US018084.

XX PR 02-SEP-1997; 97US-00923771.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Chen D, Srivatsa GS;

XX DR WPI; 1999-205198/17.

XX PT New compositions comprising sensor arrays made up of unique probe
 XX PT oligonucleotides - useful for characterizing a sample of target deletion
 XX PT oligonucleotides.

XX PS Example 1; Page 90; 163pp; English.

XX CC This invention describes a novel composition comprising a number of
 CC sensor arrays, where each array comprises a unique probe oligonucleotide,
 CC which is the reverse complement of part of a unique target
 CC oligonucleotide present in a mixture of target deletion sequence
 CC oligonucleotides. The compositions form a method for characterizing a
 CC sample of target deletion oligonucleotides which are labelled and
 CC hybridize with the probe oligonucleotides of the sensor arrays. Such
 CC oligonucleotides and their targets are represented in AAX23548-X23709.
 CC Oligonucleotides characterized by the method form pharmaceutical
 CC compositions that are useful for modulating cellular adhesion or
 CC proliferation, and being active against a eukaryotic pathogen, a human
 CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
 CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
 CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
 CC characterization of deletion sequence oligonucleotides having related,
 CC but different nucleobase sequences, and quantification of different
 CC species of deletion sequence ("target") oligonucleotides in a mixture.

CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
 CC its reverse complement is not modified, the method may be performed using
 CC oligodeoxynucleotides

XX SQ Sequence 20 BP; 0 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 135 GAAGAAGATCAACG 149
 |||||
 Db 16 GAAGAAGACGAAACG 2

RESULT 2295
 AAX93254
 ID AAX93254 standard; DNA; 20 BP.

XX AC AAX93254;

XX DT 13-SEP-1999 (first entry)

XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
 XX KW neutralising epitope; PCR primer; ss.

XX OS Synthetic.

XX OS Chlamydophila pneumoniae.

XX FN WO9927105-A2.

XX PD 03-JUN-1999.

XX PF 20-NOV-1998; 98WO-IB001890.

XX PR 21-NOV-1997; 97FR-00014673.

XX PR 04-NOV-1998; 98US-0107078P.

XX PA (GEST) GENSET.

XX PI Griffais R;

XX DR WPI; 1999-357842/30.

XX PT Genome sequence of Chlamydia pneumoniae.

XX PS Page 1575; Disclosure; 1912pp; English.

XX CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
 XX CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
 XX CC (see AAX91990). C. pneumoniae causes respiratory disease such as
 XX CC pneumonia and bronchitis and is thought to be a contributing factor in
 XX CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 XX CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 XX CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
 XX CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 XX CC nucleotides sequences can also be used as immunogenic compositions,
 XX CC especially where the vector directs the expression of a neutralising
 XX CC epitope of C. pneumoniae

XX SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1224 GGAGGAACAGCTACA 1238
 |||||
 Db 1 GGAAGAAGACGCTACA 15

```

RESULT 2296
AA96164/c
ID AAX96164 standard; DNA; 20 BP.
XX
AC AAX96164;
XX
XX 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydia pneumoniae.
XX
XX WO927105-A2.
PN
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
BF
XX
XX 21-NOV-1997; 97FR-00014673.
PR
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GIST ) GENSET.
PA
XX
XX Griffais R;
PI
XX
XX WPI; 1999-357842/30.
DR
XX
XX Genome sequence of Chlamydia pneumoniae.
PT
XX
XX Page 1804; Disclosure; 1912pp; English.
PS
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAX34584- AAX35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
XX Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 778 AAACACGCCACATC 792
DB 20 AAACATGCCACATC 6
|||||
|||||

RESULT 2297
AA40720
ID AAA40720 standard; DNA; 20 BP.
XX
XX AAA40720;
AC
XX
XX 15-AUG-2000 (first entry)
DT
XX
XX Mouse multidrug resistance protein primer SEQ ID NO:157.
DE
XX
XX Human; rat; CD36; SHR; spontaneous hypertensive rat; diagnosis; therapy;
KW screening; polymorphism; variant; detection; mutant; blood; mutation;
KW insulin; glucose metabolism; fatty acid metabolism; catecholamine;

```

```

KW malaria; infection; parasite; antiparasitic; antidiabetic; primer; ss.
XX
XX Mus sp.
OS
XX WO200019883-A2.
XX
XX 13-APR-2000.
PD
XX
XX 07-OCT-1999; 99WO-US023418.
PF
XX
XX 07-OCT-1998; 98US-00167750.
PR
XX 28-DEC-1998; 98US-00221222.
PR
XX 17-MAR-1999; 99US-00270542.
XX
XX (MEDI-) MEDICAL RES COUNCIL.
PA (SCIO-) SCIOS INC.
PA (AITM/) AITMAN T J.
PA (SCOT/) SCOTT J.
PA (STAN/) STANTON L W.
XX
XX Aitman TJ, Scott J, Stanton LW;
PI
XX
XX WPI; 2000-303596/26.
DR
XX
XX Nucleic acids encoding mutant CD36 proteins useful for preventing,
PT diagnosing and treating parasitic infections, especially malaria.
PT
XX
XX Example 1; Page 125; 167pp; English.
PS
XX
XX The present invention describes isolated nucleic acid molecules (A)
CC encoding mutant CD36 proteins (B). Parasites such as Plasmodium
CC falciparum (the major cause of malaria) are unable to utilise the mutated
CC proteins to gain entry to, and infect cells. The mutant CD36 proteins do
CC not function correctly preventing parasites utilising them to infect
CC cells. The nucleic acids may be used for the recombinant production of
CC mutant CD36 proteins according to standard methodologies. They may be
CC used in this way to prevent and treat parasitic infections that utilise
CC the CD36 protein to infect cells, such as P. falciparum, the major cause
CC of malaria. For example, the protein may be used to identify modulators
CC of CD36 expression and activity or a patient's CD36 DNA may be screened
CC to determine whether there are any mutations present that may confer
CC resistance to parasitic infections. The proteins and nucleic acids may
CC also be used to prevent, diagnose and treat diseases associated with
CC defects in insulin action and/or glucose metabolism and/or fatty acid
CC metabolism and/or catecholamine action in subjects possessing mutations
CC in the CD36 genes. AA40606 to AA40759, and AA802515 to AA802564.
CC represent nucleotide and amino acid sequences respectively which are used
CC in the exemplification of the present invention
XX
XX Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 538 CCCATCTTTCACAAAG 552
DB 4 CCCATCTTTCAGAG 18
|||||
|||||

RESULT 2298
AAZ72882/c
ID AAZ72882 standard; DNA; 20 BP.
XX
XX AAZ72882;
AC
XX
XX 10-SEP-2001 (first entry)
DT
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:7238.
DE
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;

```

KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
OS Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX (GEST) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 1774; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterization of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 20 BP; 9 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1235 TACACTTCATCTCC 1249
XX Db 17 TTCACTTCATCTCC 3
XX
XX RESULT 2299
XX AAA79748/c
XX ID AAA79748 standard; DNA; 20 BP.
XX
XX AC AAA79748;
XX
XX 20-NOV-2000 (first entry)
XX
XX Hepatitis B virus related oligonucleotide probe #11.
XX
XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
XX mutation; high-density gene chip; ss.
XX
XX Hepatitis B virus.
XX
XX CN1252452-A.
XX
XX 10-MAY-2000.
XX
XX 24-SEP-1999; 99CN-00114460.
XX

PR 24-SEP-1999; 99CN-00114460.
XX
XX (UYDO-) UNIV DONGNAN.
XX
XX Sun X, Lu Z, Wang Y;
XX WPI; 2000-443233/39.
XX
XX High-density gene chip making process.
XX
XX Example 1; Fig 15; 19pp; Chinese.
XX
XX The present invention describes a method which comprises making a high-
XX density gene chip, specifically for making high-density micro-array of
XX oligonucleotide probes. An oligonucleotide probe selecting process to
XX seek preferentially length variable and coverage variable probes is
XX provided to ensure identical cross melting temperature of probes to the
XX maximum limit, and this can make the cross control of gene chip
XX relatively simple and raise the reliability of the gene chip detecting
XX results. The process proposes a specific probe selection method for
XX detecting target sequence directly, detecting mutation in both specific
XX and non-specific sites and a probe overall arrangement scheme. AAA79738
XX to AAA80201 represent oligonucleotide probe sequences which are used in
XX examples from the present invention
XX
XX SQ Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 828 CCTACCCCTGCTCTT 842
XX Db 15 CCTAACCCCTGCTCTT 1
XX
XX RESULT 2300
XX AAA38236
XX ID AAA38236 standard; DNA; 20 BP.
XX
XX AC AAA38236;
XX
XX 21-AUG-2000 (first entry)
XX
XX Human angiotensin-converting enzyme (ACE) PCR primer, SEQ ID NO:36.
XX
XX Angiotensin-converting enzyme gene; ACE; polymorphism;
XX polymorphic marker; cardiovascular disease; myocardial infarction;
XX unstable angina; hypertension; atherosclerosis; stroke; prognosis;
XX drug screening; treatment outcome; human; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200022166-A2.
XX
XX 20-APR-2000.
XX
XX 13-OCT-1999; 99WO-IB001678.
XX
XX 14-OCT-1998; 98US-0104286P.
XX 14-OCT-1998; 98US-0104302P.
XX
XX (EURO-) EURONA MEDICAL AB.
XX
XX Norberg LT, Andersson MK, Lindstrom PHR, Jonsson L;
XX WPI; 2000-318010/27.
XX
XX Assessing cardiovascular status in humans involves comparing test
XX polymorphic pattern comprising polymorphic positions within genes
XX encoding specific proteins, with reference polymorphic pattern.
XX
XX Example 1; Page 49; 126pp; English.
XX

Tue Nov 2 13:39:09 2004

XX The invention relates to a novel method of assessing the cardiovascular
 CC status in an individual and to newly identified polymorphisms in the
 CC genes encoding angiotensin-converting enzyme (ACE), angiotensin II
 CC receptor type 1 (AT1) and type 2 (AT2), angiotensinogen (AGT), renin,
 CC aldosterone synthase, endothelin receptor type A and beta-adrenergic
 CC receptors 1 and 2. The method comprises determining the sequence at one
 CC or more polymorphic positions within these genes, and comparing the
 CC pattern of polymorphisms from the individual with a reference polymorphic
 CC pattern obtained from a population of individuals exhibiting a
 CC predetermined cardiovascular disease status. The polymorphic markers are
 CC useful for determining the predisposition of an individual to
 CC cardiovascular disorders such as myocardial infarction, unstable angina,
 CC hypertension, atherosclerosis and stroke. They are also useful for
 CC predicting the likely cardiovascular status of a patient given a
 CC treatment regimen comprising administration of cardiovascular drugs
 CC (e.g., ACE inhibitors, beta-adrenergic receptor antagonists (beta-
 CC blockers) or calcium channel blockers). One or more polymorphic markers
 CC provides a basis for predicting the outcome of a treatment regimen.
 CC Fragments of the genes comprising a polymorphic site may be used as
 CC primers and probes for detecting genetic polymorphisms or in molecular
 CC library arrays for high throughput screening. The genes, and the proteins
 CC they encode are useful in the screening of potential cardiovascular
 CC drugs. Determination of an individual's polymorphic pattern reduces or
 CC eliminates trial and error in selecting a treatment for a particular
 CC individual cardiovascular patient. It also provides the ability to
 CC eliminate patients from clinical trials who are predicted to be non-
 CC responsive, or at a risk for an adverse response, to a particular
 CC treatment regimen. Adverse results in an early trial can be evaluated to
 CC identify polymorphic patterns so that the adverse results can be
 CC correlated with a sub-population of the test population, permitting
 CC exclusion of such sub-populations from the treatment group. Beneficial
 CC drugs can be approved for use in the appropriate population, thereby
 CC decreasing the number of patients required for a clinical trial, which in
 CC turn decreases the duration and cost of such trials. Sequences AAA38201-
 CC A38239 represent PCR primers used in an exemplification of the invention
 CC to amplify short fragments of the human ACE gene (AAA38328-AAA38330) for
 CC sequence determination

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1544 CCAGCCTTCGGTCTT 1558
 DB 4 CCAGCCTTCGGTCTT 18
 |||||
 |||||

RESULT 2301
 AAC61236
 ID AAC61236 standard; DNA; 20 BP.
 XX AAC61236;
 AC AAC61236;
 XX 30-JAN-2001 (first entry)
 DT
 DE Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 36.
 XX Human; genetic polymorphism; disease diagnosis; treatment; cancer;
 KW cardiovascular system; nervous system; glaucoma; PCR primer; ss.
 XX Homo sapiens.
 OS
 XX WO200056922-A2.
 PN
 XX 28-SEP-2000.
 FD
 XX 23-MAR-2000; 2000WO-GB001102.
 XX
 PF
 XX 23-MAR-1999; 99US-0126046P.
 PR 23-MAR-1999; 99WO-1B000497.
 PR

PR 24-MAR-1999; 99US-0126243P.
 XX 23-DEC-1999; 99US-00471890.
 PA (GEMI-) GEMINI GENOMICS AB.
 XX Lindstrom PHR, Norberg LT, Jonsson L, Olaisson E, Sanders R;
 PI WPI; 2000-638268/61.
 XX
 DR Assessing disease status in individual by determining sequence(s) at one
 XX or more polymorphic positions within the human genes encoding the
 PT protein(s) involved in physiological pathway associated with treatment
 PT regime.
 XX Example 1; Page 56; 141pp; English.
 PS
 XX The present invention is related to methods for determining the
 CC polymorphic pattern of an individual and using the results to determine
 CC their risk of a number of diseases, including cancer, cardiovascular
 CC diseases, glaucoma and nervous system disorders such as depression and
 CC neurodegenerative diseases. In addition, the methods can be used to
 CC determine the effects of different types of treatment for individuals,
 CC and thus enables appropriate therapies to be prescribed. The PCR primers
 CC shown in sequences AAC61201-C61371 were all used to demonstrate the
 CC methods of the invention

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1544 CCAGCCTTCGGTCTT 1558
 DB 4 CCAGCCTTCGGTCTT 18
 |||||
 |||||

RESULT 2302
 AAA95391/c
 ID AAA95391 standard; DNA; 20 BP.
 XX AAA95391;
 AC AAA95391;
 XX 12-FEB-2001 (first entry)
 DT
 DE Rat FGR coding sequence PCR primer #2.
 XX
 XX Rat; Nurr1; tyrosine hydroxylase; catecholamine-related disease;
 KW Parkinson's disease; manic depression; schizophrenia; PCR primer; ss.
 XX Rattus norvegicus.
 OS
 XX WO200058451-A1.
 PN
 XX 05-OCT-2000.
 PD
 XX 21-MAR-2000; 2000WO-US007544.
 PF
 XX 26-MAR-1999; 99US-00277078.
 PR (SALK) SALK INST BIOLOGICAL STUDIES.
 XX
 XX Sakurada K, Palmer T, Gage FH;
 PI WPI; 2000-656165/63.
 XX
 DR Cell comprising exogenous nucleic acid inducing tyrosine hydroxylase
 PT expression useful for treating catecholamine-related diseases such as
 PT Parkinson's disease, manic depression and schizophrenia.
 XX Example 1; Page 20; 68pp; English.
 PS
 XX The present invention describes the rat Nurr1 coding and protein
 CC

CC sequences. The Nurrl protein is involved in the induction of tyrosine
 CC hydroxylase expression in adult rat-derived hippocampal progenitor cells.
 CC The Nurrl gene and protein can be used in the treatment of catecholamine-
 CC related diseases such as Parkinson's disease, manic depression and
 CC schizophrenia. They can also be used to induce tyrosine hydroxylase
 CC expression and identify tyrosine hydroxylase related deficiencies, which
 CC are linked to the same diseases. The present sequence is a PCR primer
 CC used in a method to differentiate adult neural progenitor cells
 XX
 SQ Sequence 20 BP; 5 A; 6 C; 2 G; 5 T; 0 U; 2 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 78.3%; Pred. No. 1.2e+03;
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1022 TCAAGCTGGCTGACTTTGG 1040
 DB 19 TGAAGATHCGDCACTTGG 1

RESULT 2303
 AAA66189
 ID AAA66189 standard; DNA; 20 BP.
 XX
 AC AAA66189;
 XX
 DT 09-OCT-2000 (first entry)
 XX
 DE Dog genomic marker oligonucleotide sequence SEQ ID NO:51.
 XX
 KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.
 XX
 OS Canis familiaris.
 XX
 PN WO200029615-A2.
 XX
 PD 25-MAY-2000.
 XX
 PF 15-NOV-1999; 99WO-IB001907.
 XX
 PR 13-NOV-1998; 98US-0108193P.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Galibert F, Andre C;
 XX
 DR WO200029615-A2.
 XX
 PD 25-MAY-2000.
 XX
 PF 15-NOV-1999; 99WO-IB001907.
 XX
 PR 13-NOV-1998; 98US-0108193P.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Galibert F, Andre C;
 XX
 DR WPI; 2000-387821/33.
 XX
 PT New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.
 XX
 PS Claim 1; Page 55; 87pp; English.
 XX
 CC The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;

QY 718 GAACATGAAGAGGGG 732
 DB 16 GAGCATGAAGAGGGG 2

RESULT 2305
 AAC79540/c
 ID AAC79540 standard; DNA; 20 BP.
 XX
 AC AAC79540;
 XX

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1637 GGACGGCTGGAGG 1651
 DB 6 GGCAGAGGCTGGAGG 20

RESULT 2304
 AAA66813/c
 ID AAA66813 standard; DNA; 20 BP.
 XX
 AC AAA66813;
 XX
 DT 09-OCT-2000 (first entry)
 XX
 DE Dog genomic marker oligonucleotide sequence SEQ ID NO:675.
 XX
 KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.
 XX
 OS Canis familiaris.
 XX
 PN WO200029615-A2.
 XX
 PD 25-MAY-2000.
 XX
 PF 15-NOV-1999; 99WO-IB001907.
 XX
 PR 13-NOV-1998; 98US-0108193P.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Galibert F, Andre C;
 XX
 DR WPI; 2000-387821/33.
 XX
 PT New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.
 XX
 PS Claim 1; Page 82; 87pp; English.
 XX
 CC The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases
 XX
 SQ Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 718 GAACATGAAGAGGGG 732
 DB 16 GAGCATGAAGAGGGG 2

RESULT 2305
 AAC79540/c
 ID AAC79540 standard; DNA; 20 BP.
 XX
 AC AAC79540;
 XX

DT 07-FEB-2001 (first entry)
 XX Murine p38beta antisense oligonucleotide SEQ ID 65.
 DE
 XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
 KW antiarthritis; antiarthritic; immunosuppressive; cardiant; heart disease;
 KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
 KW phosphorothioate; ss.
 XX
 OS Mus sp.
 XX
 XX WO200059919-A1.
 PN
 XX 12-OCT-2000.
 PD
 XX 04-APR-2000; 2000WO-US008794.
 PF
 XX 06-APR-1999; 99US-00286904.
 PR
 XX (ISTS-) ISIS PHARM INC.
 PA
 XX Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;
 PI
 XX WPI; 2000-664982/64.
 DR
 XX Antisense compound targeted to p38 mitogen activated protein kinase
 PT inhibits protein kinase and is useful for diagnosing and treating
 PT inflammatory, autoimmune and heart disease.
 PT
 XX Example 5; Page 53; 90pp; English.
 PS
 XX This invention relates to antisense compounds 8-30 nucleobases in length
 CC targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
 CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
 CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
 CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
 CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
 CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
 CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and
 CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
 CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
 CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
 CC The antisense oligonucleotides have antiarthritis; antiarthritic;
 CC immunosuppressive; cardiant and antiinflammatory activity. The antisense
 CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
 CC cells or tissues. The oligonucleotides are used for treating an animal
 CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
 CC arthritis, or heart disease. The oligonucleotides are also useful for
 CC inhibiting inflammation or apoptosis
 CC
 XX Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1638 GCAGCGGCTGCAGGG 1652
 DB 15 GCAGCGGCTGCAGGG 1
 RESULT 2306
 AAF55056
 ID AAF55056 standard; DNA; 20 BP.
 XX
 AC AAF55056;
 XX
 DT 15-MAY-2001 (first entry)
 XX PCR primer used to amplify a fragment of the mumps genome.
 DE
 XX

KW Encapsidation protein; transcription protein; replication protein;
 KW cell targeting; gene therapy; attenuated virus; vaccine; mumps;
 KW PCR primer; ss.
 XX
 OS Mumps virus.
 XX
 PN WO200109309-A2.
 XX
 PD 08-FEB-2001.
 XX
 XX 02-AUG-2000; 2000WO-US021192.
 PF
 XX 02-AUG-1999; 99US-0146664P.
 PR
 XX 23-JUN-2000; 2000US-0213654P.
 PR
 XX (AMHP) AMERICAN HOME PROD CORP.
 PA
 XX
 XX Clarke DK, Johnson EJ, Sidhu MS, Udem SA;
 PI
 XX WPI; 2001-123320/13.
 DR
 XX Producing a recombinant mumps virus (MUV), useful as a mumps vaccine, by
 PT transfecting or transforming a host cell with a transcription vector
 PT comprising a MUV genome or antigenome, and an expression vector encoding
 PT trans-acting proteins.
 PT
 XX Example 1; Page 37; 133pp; English.
 PS
 XX PCR primers AAF5055-56 were used to amplify a fragment of the Mumps
 CC virus genome. The amplified fragment was used in the course of the
 CC invention. The specification describes a method for producing a
 CC recombinant mumps virus. The method comprises transfecting or
 CC transforming, in a rescue composition media, a host cell with a
 CC transcription vector comprising a genome or antigenome of mumps virus,
 CC and an expression vector encoding trans-acting proteins (NP, P and L)
 CC necessary for encapsidation, transcription and replication. The method is
 CC carried out under conditions sufficient to permit the co-expression of
 CC the vectors and the production of the recombinant virus. The recombinant
 CC virus has an ability to induce long-lasting immunity with a single dose
 CC and a relatively low level of genome recombination. The recombinant
 CC produced Mumps viruses are useful in antibody generation, diagnostic,
 CC prophylactic and therapeutic applications, cell targeting, gene therapy,
 CC mutant virus preparation and immunogenic composition preparation. The
 CC method may also produce an attenuated virus for use as a vaccine for
 CC preventing or ameliorating mumps infection
 CC
 XX Sequence 20 BP; 1 A; 11 C; 2 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 828 CCTCACCCCTGTCTT 842
 DB 5 CCTCACCCCTGTCTT 19
 RESULT 2307
 AAF75317
 ID AAF75317 standard; DNA; 20 BP.
 XX
 AC AAF75317;
 XX
 XX 02-OCT-2001 (first entry)
 DT
 XX Mouse inducible NOS antisense oligonucleotide SEQ ID NO 161.
 DE
 XX Antisense oligonucleotide; inducible nitric oxide synthase; NOS;
 KW modulate expression; immunomodulator; antidiabetic; cardiovascular;
 KW cardiant; neuroprotective; vasotropic; ischaemia; reperfusion injury;
 KW 2'-O-methoxyethyl; phosphorothioate; mouse; ss.
 XX
 OS Mus sp.

```
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone, 5' and 3' five
XX FT nucleotide 2'-MOE (2'-O-methoxyethyl) wings, all cytidine
XX FT residues are 5-methylcytidines and a deoxy gap"
XX PN WO200152902-A1.
XX PD 26-JUL-2001.
XX PF 15-JAN-2001; 2001WO-US001381.
XX PR 24-JAN-2000; 2000US-00490208.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dean NM, Cowsett LM;
XX PI WPI; 2001-465340/50.
XX DR
XX PT New antisense oligonucleotides for modulating the expression of inducible
XX PT nitric oxide synthase in cells or tissues, particularly useful for
XX PT treating e.g. immunological, cardiovascular or neurological disorders, or
XX PT ischemia.
XX PS Example 17; Page 87; 144pp; English.
XX CC The invention relates to antisense compounds, especially
XX CC oligonucleotides, which are targeted to a nucleic acid encoding inducible
XX CC nitric oxide synthase and which specifically hybridize to and modulate
XX CC expression of inducible nitric oxide synthase. The antisense compounds
XX CC have immunomodulator, antidiabetic, cardiovascular, cardiant,
XX CC neuroprotective, disorder and vasotropic activity. The antisense
XX CC oligonucleotides are useful for inhibiting the expression of inducible
XX CC nitric oxide synthase in cells or tissues. In particular, the antisense
XX CC oligonucleotides are useful for treating diseases or disorders associated
XX CC with inducible nitric oxide synthase, e.g. diabetes, immunological
XX CC disorder, cardiovascular disorder, neurological disorder or
XX CC ischaemia/reperfusion injury. The antisense oligonucleotides are also
XX CC useful for research and diagnostics. The present sequence is that of an
XX CC antisense 2'-O-methoxyethyl gapped oligonucleotide with a
XX CC phosphorothioate backbone, a central "gap" region of ten nucleotides
XX CC flanked by five nucleotide 2'-MOE (2'-methoxyethyl) wings and 5-
XX CC methylcytidine residues throughout the oligonucleotide. The antisense
XX CC oligonucleotide is targeted to mouse inducible nitric oxide synthase (NOS)
XX CC mRNA (AAH47974)
XX SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1416 TCGAAATCGGATCTC 1430
||| ||||| |||||
Db 1 TCTAAATCGGATCTC 15
RESULT 2308
AAC92776/c
ID AAC92776 standard; DNA; 20 BP.
XX AC AAC92776;
XX DT 27-MAR-2001 (first entry)
XX DE Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:48.
XX KW Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX KW heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX KW mRNA processing; transport; stabilisation; alternative splicing;
XX KW donor splice site selection; telomere biogenesis; oncogenesis;
```

```
KW mRNA processing; transport; stabilisation; alternative splicing;
KW donor splice site selection; telomere biogenesis; oncogenesis;
KW apoptosis-associated protein; cancer; tumour formation;
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX Homo sapiens.
XX US6165789-A.
XX PD 26-DEC-2000.
XX PF 27-OCT-1999; 99US-00428696.
XX PR 27-OCT-1999; 99US-00428696.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowsett LM;
XX PI WPI; 2001-090484/10.
XX DR
XX PT Novel antisense compound targeted to human hnRNP A1 which specifically
XX PT hybridizes with and inhibits the expression of human hnRNP A1, useful for
XX PT modulating the expression of hnRNP A1 in cells.
XX PS Claim 3; Col 41-42; 38pp; English.
XX CC Sequences AAC92738-C92817 represent antisense oligonucleotides targeted
XX CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which
XX CC inhibit its expression. The antisense oligonucleotides were designed to
XX CC target different regions of the human hnRNP A1 mRNA, and were analysed
XX CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.
XX CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core
XX CC protein A1 and p40CRS) is thought to function in the stabilisation,
XX CC transport and processing (including alternative splicing) of newly
XX CC synthesised mRNAs. It facilitates the annealing of single-stranded
XX CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,
XX CC and shuttles continuously between the nucleus and the cytoplasm acting as
XX CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere
XX CC biogenesis, with low levels of hnRNP correlating with shortened
XX CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis
XX CC -associated protein on the basis that it is specifically cleaved into
XX CC three fragments during antibody-mediated apoptosis. Due to its ability to
XX CC control splicing events, particularly donor splice site selection, hnRNP
XX CC A1 is implicated in the process of oncogenesis. The oligonucleotides of
XX CC the invention are useful for diagnosis, prevention and treatment of
XX CC conditions associated with hnRNP A1 expression, such as cancer
XX SQ Sequence 20 BP; 7 A; 8 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 229 AGTGTGTGTGTGTGC 243
||| ||||| |||||
Db 16 AGTGTGTGTGTGTGC 2
RESULT 2309
AAC92806/c
ID AAC92806 standard; DNA; 20 BP.
XX AC AAC92806;
XX DT 27-MAR-2001 (first entry)
XX DE Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:78.
XX KW Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;
XX KW heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;
XX KW mRNA processing; transport; stabilisation; alternative splicing;
XX KW donor splice site selection; telomere biogenesis; oncogenesis;
```

KW apoptosis-associated protein; cancer; tumour formation;
 KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6165789-A.
 XX
 XX 26-DEC-2000.
 XX
 XX 27-OCT-1999; 99US-00428696.
 XX
 XX 27-OCT-1999; 99US-00428696.
 PR
 XX (ISIS-) ISTS PHARM INC.
 XX
 XX Monia BP, Cowser LM;
 XX
 XX WPI; 2001-090484/10.
 DR
 XX
 XX Novel antisense compound targeted to human hnRNP A1 which specifically
 PT hybridizes with and inhibits the expression of hnRNP A1, useful for
 PT modulating the expression of hnRNP A1 in cells.
 PT
 XX
 PS Example 15; Col 41-42; 38pp; English.
 XX
 XX Sequences AAC92738-C92817 represent antisense oligonucleotides targeted
 CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which
 CC inhibit its expression. The antisense oligonucleotides were designed to
 CC target different regions of the human hnRNP A1 mRNA, and were analysed
 CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.
 CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core
 CC protein A1 and p40CRS) is thought to function in the stabilisation,
 CC transport and processing (including alternative splicing) of newly
 CC synthesised mRNAs. It facilitates the annealing of single-stranded
 CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,
 CC and shuttles continuously between the nucleus and the cytoplasm acting as
 CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere
 CC biogenesis, with low levels of hnRNP correlating with shortened
 CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis
 CC -associated protein on the basis that it is specifically cleaved into
 CC three fragments during antibody-mediated apoptosis. Due to its ability to
 CC control splicing events, particularly donor splice site selection, hnRNP
 CC A1 is implicated in the process of oncogenesis. The oligonucleotides of
 CC the invention are useful for diagnosis, prevention and treatment of
 CC conditions associated with hnRNP A1 expression, such as cancer
 XX
 XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1115 ACATCCTGCTGGGT 1129
 |||||
 Db 20 AACCTGCTGGGT 6
 RESULT 2310
 AAF62218
 ID AAF62218 standard; DNA; 20 BP.
 XX
 AC AAF62218;
 XX
 XX 21-MAY-2001 (first entry)
 DT
 XX PCR primer for factor H (AM binding protein) gene sequence.
 DE
 XX Adrenomedullin; AM; factor H; AM binding protein; heart disease; sepsis;
 KW pulmonary disease; liver cirrhosis; cancer; diabetes; inflammation;
 KW tumour; PCR primer; ss; mouse.
 XX
 OS Mus sp.
 XX

PN WO200118550-A2.
 XX
 PD 15-MAR-2001.
 XX
 PF 08-SEP-2000; 2000WO-US024722.
 XX
 PR 10-SEP-1999; 99US-0153397P.
 XX
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA
 XX Cuttitta F, Elsasser TH, Martinez A, Pio R;
 PI
 XX WPI; 2001-235224/24.
 XX
 XX Measuring adrenomedullin (AM) level, useful for diagnosing a disease, or
 PT determining severity of a disease characterized by abnormal AM level,
 PT comprises incubating the sample with a chaotropic agent to dissociate AM
 PT and factor H.
 XX
 XX Example 14; Page 52; 89pp; English.
 PS
 XX A method for measuring adrenomedullin (AM) levels in a sample, comprises
 CC incubating the sample with a chaotropic agent to dissociate AM and
 CC factor H. After dissociation, the sample is fractionated to obtain a
 CC peptide fraction, and the AM levels in the peptide fraction are
 CC quantified. The method for measuring AM levels, particularly circulating
 CC AM levels, is useful for disease diagnosis, for determining disease
 CC severity, and for following the course of treatment of diseases
 CC characterised by altered or abnormal AM levels. These diseases include
 CC heart diseases, pulmonary diseases, liver cirrhosis, cancer, diabetes,
 CC sepsis, and inflammation. AM-binding proteins such as factor H, are
 CC useful for the diagnosing, treating or monitoring AM-related diseases,
 CC particularly those diseases associated with abnormally elevated AM
 CC levels, and for quantifying plasma AM to diagnose and/or monitor the
 CC presence or progression of diseases characterised by altered
 CC concentrations of circulating AM. Peptides derived from factor H may be
 CC used as therapeutics for the inhibition of growth and proliferation of
 CC cancer or tumour cells, including urinary bladder, urethral, renal,
 CC rectal, colon, small intestine, gastric, oesophageal, salivary gland,
 CC gallbladder, liver, breast, vaginal, endometrial, ovarian, cervical,
 CC prostate, skin, lung, and brain cancers. The present sequence represents
 CC a PCR primer specific for the murine factor H gene. The primer is used to
 CC confirm the expression of the factor H gene in murine pancreas
 XX
 XX Sequence 20 BP; 4 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1502 CTTCCATATTGCAC 1516
 |||||
 Db 3 CTTCCATCTTGCAC 17
 RESULT 2311
 AAD04441
 ID AAD04441 standard; DNA; 20 BP.
 XX
 AC AAD04441;
 XX
 XX 04-JUL-2001 (first entry)
 DT
 XX Forward PCR primer used for sequencing fragment 5 of human HTR1B gene.
 DE
 XX Human; 5-hydroxytryptamine receptor 1B; HTR1B; serotonin; gene therapy;
 KW therapeutic; forensic application; migraine; neurological disorder;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200125194-A2.
 PN
 XX

PD 12-APR-2001.
XX
PF 05-OCT-2000; 2000WO-US027486.
XX
PR 07-OCT-1999; 99US-0158114P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Choi JY, Denton RR, Nandabalan K, Stephens JC;
XX
DR WPI, 2001-290602/30.
XX
XX Polynucleotide useful for therapeutic purposes, comprises nucleotide polymorphisms in 5-hydroxytryptamine (serotonin) receptor 1B gene.
PT
PT Example 1; Page 27; 47pp; English.
XX
XX The patent discloses a polynucleotide comprising one or more of 3 novel single nucleotide polymorphisms in the human 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) gene. The polymorphic variant comprises at least one polymorphism selected from guanine at PS1, thymine at PS2, and adenine at PS4, or adenine at position corresponding to nucleotide 540. The HTR1B gene is useful for therapeutic purposes. It is useful in studying the expression and biological function HTR1B, as well as in developing drugs targeting this protein. It is also useful in diagnostics and forensic applications. Identification of HTR1B is useful between a trait and at least one genotype or haplotype of HTR1B is useful for developing tests and therapeutic treatments for migraine and other neurological disorders. It is also used in gene therapy. The present DNA sequence is a forward PCR primer which is used for sequencing fragment 5 of HTR1B gene. This primer corresponds to 1242-1261 bases of the HTR1B gene
XX
XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
QY Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 1 CACGGTCTACTCCAC 15
QY 1131 CACGGACTACTCCAC 1145
|||||
Db 1 CACGGTCTACTCCAC 15
RESULT 2312
AAH00813/c
ID AAH00813 standard; DNA; 20 BP.
AC AAH00813;
XX
XX 24-JUL-2001 (first entry)
DT
XX
DE Cryptosporidium parvum nucleotide sequence SEQ ID NO:804.
XX
KW Species specific; genus specific; family specific; probe; detection; identification; algal; archaeal; bacterial; fungal; parasitological; microorganism; diagnosis; translation elongation factor Tu; toxin; translation elongation factor G; RecA recombinase; resistance; catalytic subunit of proton-translocating ATPase; antimicrobial; vaccine; primer; ss.
XX
XX Cryptosporidium parvum.
OS
XX
XX W0200123604-A2.
PN
XX
PD 05-APR-2001.
XX
XX 28-SEP-2000; 2000WO-CA001150.
PF
XX
XX 28-SEP-1999; 99CA-02283458.
PR
XX 19-MAY-2000; 2000CA-02307010.
PR
XX (INFE-) INFECTIO DIAGNOSTIC (IDI) INC.
PA

XX
PI Bergeron MG, Boissinot M, Huletsky A, Menard C, Ouellette M;
PI Picard FJ, Roy PH;
XX
XX WPI; 2001-245006/25.
DR
XX
XX Nucleic acid sequences are used to generate universal probes and primers which can be used to identify and detect the presence of algal, archaeal, bacterial, fungal and parasitological species in a test sample.
PT
PT
XX
XX Claim 11; Page 860; 1580pp; English.
XX
XX The present invention describes a method for generating a repertoire of nucleic acids of tuf, fus, atpD and/or recA genes from which probes and/or primers are derived. The method comprises amplifying the nucleic acids of determined algal, archaeal, bacterial, fungal and parasitological species with a combination of defined primer pairs. The method can be used for producing probes and/or primers for detecting one or more related microorganisms e.g. algae, archaea, bacteria, fungi and parasites, for universal detection and for specific and ubiquitous detection and identification of an algal, archaeal, bacterial, fungal and parasitological species, genus, family and group. A nucleic acid (I) obtained using the method of the invention can be used for the universal detection of any bacterium, fungus or parasite in a sample and for the detection of at least one antimicrobial agent resistance gene or at least one toxin gene. hexA nucleic acids are used for the specific and ubiquitous detection and for identification of Streptococcus pneumoniae. (I) can be used to design a therapeutic agent which is effective against microorganisms. Microbial species or genus or family or phylum or group which can be detected include Abiotrophia adiacens, Bordetella sp., Corynebacterium sp., Enterobacteriaceae group, Escherichia coli, Mycobacteriaceae family, Pseudomonads group, Streptococcus sp., Neisseria gonorrhoeae and Staphylococcus sp.. Using DNA based tests provides faster results than substrate specificity tests as results can be determined in an hour and improved accuracy is also achieved. AAH00010 to AAH002304 represent nucleotide sequences and primers/probes which are given in the exemplification of the present invention
XX
XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
QY Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1189 GCCACAGGCGCGTCCC 1203
|||||
Db 18 GCCACAGGCGCGTCCC 4
RESULT 2313
AAH22573/c
ID AAH22573 standard; DNA; 20 BP.
XX
XX AAH22573;
AC
XX
XX 07-SEP-2001 (first entry)
DT
XX
XX PK-2 transgene detecting primer.
DE
XX
XX Protein kinase stress-related protein; PKSRP; stress-tolerance; CDPK; receptor protein kinase; RPK; receptor-like kinase; protein kinase; PK-1; calcium dependent protein kinase; SNF1 serine/threonine protein kinase; mitogen-activated protein kinase; MAPK; RUK; PK-2; transgenic; drought; salinity; PCR primer; ss.
XX
XX Physcomitrella patens.
OS
XX
XX W0200145492-A2.
PN
XX
XX 28-JUN-2001.
PD
XX
XX 22-DEC-2000; 2000WO-US034970.
PF
XX

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PR 22-DEC-1999; 99US-0171745P.
XX
XX (BADI ) BASF PLANT SCI GMBH.
XX
XX Costa E SilvaOD, Ishitani M, Henkes S, Van Thielien N, Chen R;
XX WPI; 2001-417952/44.
XX
XX Protein kinase stress-related protein and nucleic acid encoding the
XX PT proteins, for producing transgenic plants having increased tolerance to
XX PT environmental stress including salinity, drought and temperature.
XX PS Example 8; Page 60; 86pp; English.
XX
XX The invention relates to protein kinase stress-related protein (PKSRP)
XX CC useful for increasing stress-tolerance in plants, obtained from
XX CC Physcomitrella patens. The PKSRP protein is selected from receptor
XX CC protein kinases (RPK), receptor-like kinases (RLK), calcium dependent
XX CC protein kinases (CDPK), SNF1 serine/threonine protein kinases, mitogen-
XX CC activated protein kinases (WAPK), intermediate upstream mitogen-activated
XX CC protein kinases (MAPKK) and upstream mitogen-activated protein kinases
XX CC (WAPKK). PKSRP is preferably protein kinase-1 (PK-1), PK-2 or mitogen-
XX CC activated protein kinase-1 (MAPK-1). PKSRP coding nucleic acid is useful
XX CC for producing transgenic plants, such as maize, wheat, rye, oat, rice,
XX CC triticale, barley, soybean, peanut, cotton, rape seed, canola, manihot,
XX CC pepper, sunflower, tegetes, solanaceous plants, potato, tobacco, tomato,
XX CC eggplant, Vicia species, pea, alfalfa, cacao, coffee, tea, Salix species,
XX CC oil palm, coconut, perennial grass and forage crops with increased
XX CC tolerance to environmental stress, including drought, salinity or
XX CC temperature, as compared to a wild type variety of the plant. Sequences
XX CC AAH22573-75 represent primers for PK-2 transgene in transgenic
XX CC Arabidopsis lines
XX
XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 574 CGTGTCAGCGTATCT 588
Db 19 CGTGTCAGCGTATCT 5

RESULT 2314
AAH24592/C
ID AAH24592 standard; DNA; 20 BP.
XX
XX AAH24592;
AC
XX
XX 07-AUG-2001 (first entry)
DT
XX
XX Human endometrium cDNA clone 3-9-SP6 PCR primer #2.
DE
XX
XX Human; endometrium; gynaecological; cytostatic; gene therapy;
KW peptide therapy; endometriosis; gene expression; drug screening;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WQ200132920-A2.
PN
XX
XX 10-MAY-2001.
FD
XX
XX 03-NOV-2000; 2000WO-GB004228.
XX
XX 03-NOV-1999; 99GB-00026074.
XX
XX 03-NOV-1999; 99GB-00026076.
XX
XX 03-NOV-1999; 99GB-00026079.
XX
XX 03-NOV-1999; 99GB-00026081.
XX
XX (METR-) METRIS THERAPEUTICS LTD.
PA
XX
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PI Pappa H, Ineniecek M;
XX
XX WPI; 2001-328804/34.
XX
XX Screening for a gene or gene product associated with endometriosis, for
XX PT diagnosing or treating endometriosis, comprises selecting a gene whose
XX PT level of expression differs between healthy and diseased endometrium
XX PT tissues.
XX
XX Example; Fig 3; 106pp; English.
XX
XX The invention relates to a method for screening for a gene or gene
XX CC product associated with endometriosis. The method comprises comparing the
XX CC pattern of gene expression in a diseased endometrium tissue from a
XX CC patient suffering from endometriosis to the pattern of gene expression in
XX CC healthy endometrium tissue from the same patient, and selecting a gene
XX CC whose level of expression differs between healthy and diseased tissues.
XX CC The gene, gene product and their antagonists and agonists are useful in
XX CC the manufacture of a medicament for diagnosing or treating endometriosis.
XX CC The method is useful for screening genes or gene products that are
XX CC implicated in endometriosis. It is particularly useful in diagnosing
XX CC endometriosis, as well as for screening for agents for treating
XX CC endometriosis. Prior methods of diagnosing endometriosis are more
XX CC difficult to perform and are more expensive, normally involving surgery.
XX CC The present method allows the disease to be diagnosed and treated at
XX CC earlier stage. The present sequence is a primer used in a reverse
XX CC transcription polymerase chain reaction (RT-PCR) procedure to validate
XX CC the results of differential gene expression studies. It was used to
XX CC amplify human endometrium cDNA encoding cathepsin D
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 458 AGGACATCAACAGC 472
Db 16 AGGACATCAACAGC 2

RESULT 2315
AAD11810/C
ID AAD11810 standard; DNA; 20 BP.
XX
XX AAD11810;
AC
XX
XX 25-SEP-2001 (first entry)
DT
XX
XX Salmonella typhimurium DNA amplifying PCR primer MDH31.
DE
XX
XX MDH31; MDH2; malic acid dehydrogenase; Krebs cycle; PCR primer; ss.
KW
XX
XX Salmonella typhimurium.
OS
XX
XX US6251607-B1.
PN
XX
XX 26-JUN-2001.
PD
XX
XX 09-DEC-1999; 99US-00457474.
XX
XX 09-DEC-1999; 99US-00457474.
XX
XX (NASC-) NAT SCI COUNCIL.
PA
XX
XX Tsien H, Lin J;
PI
XX
XX WPI; 2001-431963/46.
XX
XX New PCR primer composition comprising primers MD31 and MDH2 that
XX PT specifically amplifies a DNA of Salmonella typhimurium, useful for
XX PT detecting the presence of S. typhimurium in a sample.
XX PT
XX
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PS Claim 1; Col 3; 15pp; English.
XX
CC The present invention relates to a PCR primer composition that
CC specifically amplifies a 261 base pair DNA of Salmonella typhimurium. The
CC composition comprises compounds MDH31 and MDH2. The primer composition is
CC useful for detecting the presence of S. typhimurium in a sample. The
CC present sequence is PCR primer MDH31 designed based on a gene encoding
CC malic acid dehydrogenase (MDH) which is essentially involved in krebs
CC cycle and a specific DNA of S. typhimurium
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1237 CACTTCATCTCCGT 1251
Db 20 CACTTCATCTCCGT 6
RESULT 2316
AAC83279
ID AAC83279 standard; DNA; 20 BP.
XX
AC AAC83279;
XX
DT 16-MAR-2001 (first entry)
XX
DE PCR primer used specific for DNA encoding E. coli H antigens SEQ ID 19.
XX
KW Escherichia coli; H antigen; antibody; H4; PCR primer; ss.
XX
OS Escherichia coli.
XX
PN JP2000279176-A.
XX
PD 10-OCT-2000.
XX
PF 31-MAR-1999; 99JP-00092890.
XX
PR 31-MAR-1999; 99JP-00092890.
XX
PA (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
XX
DR WPI; 2001-027455/04.
XX
PT Preparation of an Escherichia coli H antigen.
XX
PS Example 2; Page 35; 36pp; Japanese.
XX
CC This invention relates to gene sequences AAC83269 - AAC83276 which encode
CC Escherichia coli H antigens. Also included in the invention is a method
CC for the preparation of an E. coli H antigen, in which a gene encoding the
CC antigen is introduced to a host E. coli, expressed and recovered. The H
CC antigen is useful for the preparation of an antibody against a specific H
CC antigen. The present sequence represents a PCR primer used in the
CC isolation of DNA encoding the H antigens of the invention
XX
SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1564 ATGCTGACTCAGGC 1578
Db 6 AGGCTGACTCAGGC 20
RESULT 2317
AAH48612/c
ID AAH48612 standard; DNA; 20 BP.
XX
AC AAH48612;
XX
DT 20-SEP-2001 (first entry)
XX
DE Human fascin associated primer SEQ ID 64.
XX
KW Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
KW antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
KW immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
KW Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
KW autoimmune disease; transplant rejection; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200151631-A2.
XX
PD 19-JUL-2001.
XX
PF 12-JAN-2001; 2001WO-EP000362.
XX
PR 13-JAN-2000; 2000DE-01001169.
PR 02-MAR-2000; 2000DE-01010188.
XX
PA (RESK/) RESKE-KUNZ A.
PA (ROSS/) ROSS X.
PA (ROSS/) ROSS R.
PA (BROS/) BROS M.
XX
PI Reske-Kunz A, Ross X, Ross R, Bros M;
XX
WPI; 2001-451858/48.
XX
PT New regulatory sequences from the fascin gene, useful for providing
PT dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
PT against tumors and infections.
XX
PS Claim 2b; Page 110; 117pp; German.
XX
CC This invention describes novel regulatory sequences (A) derived from
CC human fascin that provide specific expression in dendritic cells (DC) and
CC which have antiviral, antibacterial, antifungal, antiparasitic, anti-
CC allergic, neurological, immunomodulatory and apoptotic activity. (A) are
CC used to regulate expression of antigens, immunoregulators, antisense
CC sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
CC cells that contain (A) are useful: (i) in vaccines against viruses,
CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
CC Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
CC allergies, infections, autoimmune diseases and transplant rejection. They
CC can also be provide specific expression of antigens and immunoregulators
CC in DC; for isolation and identification of cell factors and cis-elements
CC from regulatory sequences that mediate DC-specific expression; to
CC determine the degree of maturity of DC and to block transcription
CC factors, by providing binding sites in DC. (A) provide DC-specific
CC expression of nucleic acid under their control, allowing a more specific
CC regulation of the immune response and eliminating the long and laborious
CC purification of DC (since a complete leucocyte population may be
CC transformed), including transformation in vitro. This sequence represents
CC a primer associated with the human fascin gene described in the invention
XX
SQ Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1200 TCCCTCTTTCCGGG 1214
Db 19 TCCCTCTTTCCGGG 5
RESULT 2318
AAC86079/c

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| | | | |
|----|---|-----------------------|---|
| ID | AAC86079 | standard; DNA; 20 BP. | Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0; |
| XX | AAC86079; | | |
| AC | 574 | CGTGCAGCTATCT 588 | |
| XX | | | |
| DT | 19 | COTGTCAGCTATCT 5 | |
| XX | 29-AUG-2001 | (first entry) | |
| DE | Primer to detect CABF-2 and LZ-1 in transgenic plants. | | |
| XX | Transcription factor stress-related protein; TFSRP; stress-tolerance; | | |
| KW | CAAT-box like binding factor; CABF; DNA binding factor; DBF; primer; | | |
| KW | homeo domain/leucine zipper; HDZ; zinc-finger; ZF; leucine zipper; LZ; | | |
| KW | CABF-1; CABF-2; DBF-1; CRT/DRE binding factor-1; CBF-1; HDZ-1; ZF-1; | | |
| KW | LZ-1; transgenic plant; environmental stress; drought; salinity; PCR; | | |
| KW | temperature; metal; chemical; pathogen; oxidative stress; amplify; | | |
| KW | polymerase chain reaction; expressed sequence tag; EST; RACE PCR; | | |
| KW | Physcomitrella patens; RT-PCR; ss. | | |
| XX | Synthetic. | | |
| OS | WO200145493-A2. | | |
| XX | 28-JUN-2001. | | |
| PN | 22-DEC-2000; 2000WO-US034972. | | |
| XX | 22-DEC-1999; 99US-0171745P. | | |
| PD | (BADI) BASF PLANT SCI GMBH. | | |
| XX | Costa E SilvaOD, Van Thielen N, Chen R; | | |
| PI | WPI; 2001-417953/44. | | |
| XX | Novel transcription factor stress-related protein and nucleic acid | | |
| XX | encoding the proteins, for producing transgenic plants having increased | | |
| PT | tolerance to environmental stress including salinity, drought and | | |
| PT | temperature. | | |
| PS | Example 8; Page 69; 115pp; English. | | |
| XX | The sequences given in AAC86072-81 are primers which were used to detect | | |
| CC | DNA's encoding transcription factor stress-related proteins (TFSRP's) | | |
| CC | from Physcomitrella patens as transgenes in transgenic plants. TFSRP's | | |
| CC | are used for conferring stress-tolerance in plants. The TFSRP's of the | | |
| CC | invention are selected from CAAT-box like binding factor (CABF), DNA | | |
| CC | binding factor (DBF), homeo domain/leucine zipper (HDZ), zinc-finger (ZF) | | |
| CC | and leucine zipper (LZ), preferably CABF-1, CABF-2, DBF-1, CRT/DRE | | |
| CC | binding factor-1 (CBF-1), HDZ-1, ZF-1, LZ-1, or their homologs. The | | |
| CC | nucleic acid encoding the TFSRP's are useful for producing transgenic | | |
| CC | plants, with increased tolerance to environmental stress, including | | |
| CC | drought, salinity or temperature, as compared to a wild type variety of | | |
| CC | the plant. TFSRP nucleic acid is also useful for increasing the | | |
| CC | expression of a gene of interest within a host cell as compared to a wild | | |
| CC | -type variety of a host cell, by transforming the host cell with an | | |
| CC | expression vector comprising the TFSRP coding nucleic acid and expressing | | |
| CC | TFSRP in the cell. The environmental stress can also be metal, chemical, | | |
| CC | pathogenic and oxidative stresses or their combinations. TFSRP nucleic | | |
| CC | acid molecules, proteins, vectors and host cells are useful for | | |
| CC | identification and mapping of genomes of P.patens and related organisms, | | |
| CC | identification and localization of P.patens sequences of interest, | | |
| CC | evolutionary and protein structural studies, determination of TFSRP | | |
| CC | regions required for function, modulation of a TFSRP activity, metabolism | | |
| CC | of one or more cell functions, transmembrane transport of one or more | | |
| CC | compounds and stress resistance. TFSRP protein and nucleic acid molecules | | |
| CC | also serve as markers for specific regions of the genome and to generate | | |
| CC | algae, ciliates, plants, fungi or other microorganisms expressing mutated | | |
| CC | TFSRP nucleic acid and protein molecules such that the stress tolerance | | |
| CC | is improved | | |
| XX | Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other; | | |
| SQ | Query Match 0.8%; Score 13.4; DB 1; Length 20; | | |
| | Best Local Similarity 93.3%; Pred. No. 1.2e+03; | | |

CC also serve as markers for specific regions of the genome and to generate
 CC algae, ciliates, plants, fungi or other microorganisms expressing mutated
 CC TFSP nucleic acid and protein molecules such that the stress tolerance
 CC is improved

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 574 CGTGCAGCCTATCT 588
 Db 19 CGTGCAGCCTATCT 5

RESULT 2320
 AAC89125/C
 ID AAC89125 standard; DNA; 20 BP.

XX AC AAC89125;
 DT 07-MAR-2001 (first entry)
 DE Canine retroviral PCR primer MLVRT3250-.

XX PCR primer; immunosuppressive; cytostatic; gene therapy; retrovirus;
 KW canine; autoimmune disease; haematopoietic malignancy; malignant tumour;
 KW ss.

XX Unidentified.
 OS WO200070024-A2.

XX 23-NOV-2000.

XX 17-MAY-2000; 2000WO-EP004467.

XX 17-MAY-1999; 99EP-00401192.

XX 18-MAY-1999; 99EP-00401199.

XX (FRSA-) ETAB FR DU SANG.

XX Rigal D, Ghernati I, Corbine A, Darlix J;

XX WPI; 2001-016224/02.

XX New infectious retrovirus isolated from a canine cell line, useful for
 PT producing medicaments to treat autoimmune diseases, hematopoietic
 PT malignancies or malignant tumors and in diagnosis and gene therapy.

XX Claim 31; Fig 11; 131pp; English.

XX The present invention relates to a retrovirus of type C morphology, which
 CC sediments in a sucrose gradient at a density of 1.16-1.18 g/l. The
 CC retrovirus is infectious for canine cells and belongs to the oncovirinae
 CC group. The present sequence is a PCR primer for the retrovirus of the
 CC present invention. The retrovirus can be included in pharmaceutical
 CC compositions or medicaments to treat autoimmune diseases, hematopoietic
 CC malignancies or malignant tumors, especially in humans. The retrovirus
 CC can also be used in gene therapy to introduce a transgene into an animal,
 CC especially a human

SQ Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1357 GCACCCGACTTGAT 1371
 Db 17 GCACCCGACTTGAT 3

RESULT 2321
 AAF91350
 ID AAF91350 standard; DNA; 20 BP.

XX AC AAF91350;
 DT 04-MAY-2001 (first entry)

XX Human E2F transcription factor 1 antisense oligonucleotide #56.

XX Antisense; E2F transcription factor 1; human; infection; inflammation;
 KW tumour; ss.

XX Homo sapiens.

XX US6187587-B1.

XX 13-FEB-2001.

XX 02-MAR-2000; 2000US-00517584.

XX 02-MAR-2000; 2000US-00517584.

XX (ISIS-) ISIS PHARM INC.

XX Popoff I, Brown-Driver VL, Cowseert LM;

XX WPI; 2001-190981/19.

XX Antisense compound capable of inhibiting the expression of E2F
 PT transcription factor 1, useful for preventing or delaying infection,
 PT inflammation or tumor formation.

XX Example 15; Col 43; 40pp; English.

XX The present invention relates to antisense compounds up to 30 nucleobases
 CC in length targeted to a E2F transcription factor 1. The invention is
 CC useful for inhibiting the expression of E2F transcription factor 1 in
 CC cells or tissues. The antisense oligonucleotides may also be used as a
 CC research agent and to prevent infection, inflammation or tumours

SQ Sequence 20 BP; 2 A; 2 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1161 GGGTGTGGGTGCAT 1175

Db 5 GGGTGTAGGTGCAT 19

RESULT 2322
 AAH03059/C
 ID AAH03059 standard; DNA; 20 BP.

XX AC AAH03059;

XX 15-JUN-2001 (first entry)

XX Microorganism detection method related oligonucleotide SEQ ID NO: 83.

XX Microorganism identification; pathogen; DNA sequencing; HLA type;
 KW bi-directional sequencing; infection; mutation detection; PCR primer; ss.

XX Unidentified.

XX US6214555-B1.

XX 10-APR-2001.

XX 13-MAY-1999; 99US-00311260.

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XX 01-MAY-1996; 96US-00640672.
PR 19-JUL-1996; 96US-00684499.
PR 27-FEB-1997; 97US-00807138.
PR 20-JAN-1998; 98US-00009483.
XX (VISI-) VISIBLE GENETICS INC.
XX Leushner J, Hui M, Dunn JM, Lacroix J;
XX WPI; 2001-289718/30.
XX Composition for detecting microorganisms, comprising deoxynucleotide
XX triphosphates, dideoxynucleotide triphosphate, and thermostable
XX polymerase to incorporate dideoxynucleotide triphosphate into extending
XX polymer.
XX Disclosure; Col 63; 62pp; English.
XX The present invention provides a composition containing 4 dNTPs and at
XX least one ddNTP and a thermally stable polymerase which incorporates
XX ddNTPs into an extending nucleic acid polymer at a rate of not less than
XX 0.4 times the rate of dNTP incorporation. This can be used with the PCR
XX primers provided in the invention to detect the presence of
XX microorganisms, such as Chlamydia trachomatis, HIV or human
XX papillomavirus, in a sample. In addition, it can be used to detect
XX mutations in a specific gene, to determine HLA type, and to produce
XX sequencing fragments for further study
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1278 GTGGCCAGGCATCCT 1292
DB 16 GTGTCCAGGCATCCT 2
RESULT 2323
AAH26635
ID AAH26635 standard; DNA; 20 BP.
XX AAH26635;
AC AAH26635;
XX 26-NOV-2001 (first entry)
DT Human MADH6 mRNA antisense oligonucleotide ISIS 101931/101971.
XX MADH6; SMAD; transcription factor; human; antisense; inhibition;
KW antitumour; antiinflammatory; therapy; ss.
XX Synthetic.
XX Key Location/Qualifiers
PH modified_base 1..20
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "in the chimeric oligonucleotide, nucleotides 1-5
FT are replaced by 2'-methoxyethyl nucleotides"
FT modified_base 8
FT /*tag= d
FT /*mod_base= m5c
FT modified_base 9
FT /*tag= e
FT /*mod_base= m5c
FT modified_base 11
FT /*tag= f

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FT modified_base 14
FT /*tag= g
FT /*mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "in the chimeric oligonucleotide, nucleotides 16-
FT 20 are replaced by 2'-methoxyethyl nucleotides"
FT modified_base 18
FT /*tag= h
FT /*mod_base= m5c
FT modified_base 20
FT /*tag= i
FT /*mod_base= m5c
XX US6277636-B1.
XX 21-AUG-2001.
XX 14-SEP-2000; 2000US-00662249.
XX 14-SEP-2000; 2000US-00662249.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowser LM;
XX WPI; 2001-588921/66.
XX New antisense compounds capable of modulating expression of human Mad
XX gene family MADH6, useful for diagnosis, prophylaxis, treatment of
XX diseases associated with MADH6 expression, e.g. inflammation, infections
XX and tumors.
XX Claim 1; Col 43; 34pp; English.
XX The present sequence is that of phosphorothioate oligonucleotide ISIS
XX 101931, an antisense oligonucleotide targeted to nucleotides 37-56
XX (flanking the ATG start codon) of the human MADH6 mRNA sequence given in
XX AAH26681. A related chimeric oligonucleotide (ISIS 101971) has a 'gap'
XX region of 10 2'-deoxynucleotides, flanked on both sides (5' and 3',
XX directions) by 5-nucleotide 'wings' composed of 2'-methoxyethyl (2'-MOE)
XX nucleotides. The effects of these oligonucleotides on human MADH6 mRNA
XX levels were determined by quantitative real-time PCR. Inhibition was 58%
XX with the original oligonucleotide and 72% with the chimeric
XX oligonucleotide. MADH6 (also known as MADH9 and SMAD9) is a putative
XX member of a subgroup of SMAD family transcription factors which are
XX regulated by bone morphogenetic proteins, and may be involved in signal
XX transduction, growth inhibition and tumour suppression. Claimed antisense
XX oligonucleotides are used to inhibit expression of MADH6 in cells or
XX tissues (claimed), as a means of treating an animal, particularly a
XX human, having or being prone to a disease or condition associated with
XX MADH6 expression, e.g. to prevent, delay or treat infection, inflammation
XX or tumour formation
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1625 GAGGCCCCAGCAGGC 1639
DB 4 GAGGCCACAGCAGGC 18
RESULT 2324
AAH26636
ID AAH26636 standard; DNA; 20 BP.
XX AAH26636;
AC AAH26636;
XX

```

DT 26-NOV-2001 (first entry)

XX Human MADH6 mRNA antisense oligonucleotide ISIS 101932/101972.

DE MADH6; SMAD; transcription factor; human; antisense; inhibition;

XX antitumour; antiinflammatory; therapy; ss.

KW Synthetic.

OS

XX

PH Key

FT Location/Qualifiers

FT 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages"

FT modified_base

FT 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "in the chimeric oligonucleotide, nucleotides 1-5

FT are replaced by 2'-methoxyethyl nucleotides"

FT modified_base

FT 1

FT /tag= d

FT /mod_base= m5c

FT modified_base

FT 10

FT /tag= e

FT /mod_base= m5c

FT modified_base

FT 11

FT /tag= f

FT /mod_base= m5c

FT modified_base

FT 13

FT /tag= g

FT /mod_base= m5c

FT modified_base

FT 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "in the chimeric oligonucleotide, nucleotides 16-

FT 20 are replaced by 2'-methoxyethyl nucleotides"

FT modified_base

FT 16

FT /tag= h

FT /mod_base= m5c

FT modified_base

FT 20

FT /tag= i

FT /mod_base= m5c

XX

US6277636-B1.

XX

21-AUG-2001.

XX

14-SEP-2000; 2000US-00662249.

XX

14-SEP-2000; 2000US-00662249.

XX

(ISIS-) ISIS PHARM INC.

XX

Monia BP, Cowser LM;

XX

WPI; 2001-588921/66.

XX

New antisense compounds capable of modulating expression of human Mad

PT gene family MADH6, useful for diagnosis, prophylaxis, treatment of

PT diseases associated with MADH6 expression, e.g. inflammation, infections

PT and tumors.

XX

Claim 1; Col 43; 34pp; English.

XX

The present sequence is that of phosphorothioate oligonucleotide ISIS

CC 101932, an antisense oligonucleotide targeted to nucleotides 39-58

CC (including the ARG start codon) of the human MADH6 mRNA sequence given in

CC AAH26681. A related chimeric oligonucleotide (ISIS 101972) has a 'gap'

CC region of 10 2'-deoxynucleotides, flanked on both sides (5' and 3'

CC directions) by 5-nucleotide 'wings' composed of 2'-methoxyethyl (2'-MOE)

CC nucleotides. The effects of these oligonucleotides on human MADH6 mRNA

CC levels were determined by quantitative real-time PCR. Inhibition was 59%

CC with the original oligonucleotide and 87% with the chimeric

CC oligonucleotide, MADH6 (also known at MADH9 and SMAD9) is a putative

CC member of a subgroup of SMAD family transcription factors which are

CC regulated by bone morphogenetic proteins, and may be involved in signal

CC transduction, growth inhibition and tumour suppression. Claimed antisense

CC oligonucleotides are used to inhibit expression of MADH6 in cells or

CC tissues (claimed), as a means of treating an animal, particularly a

CC human, having or being prone to a disease or condition associated with

CC MADH6 expression, e.g. to prevent, delay or treat infection, inflammation

CC or tumour formation

XX

SQ Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1625 GAGGCCCGCAGCAGGC 1639

||||| |||||

DB 6 GAGGCCCGCAGCAGGC 20

RESULT 2325

AAH42529/c

ID AAH42529 standard; DNA; 20 BP.

XX

AC AAH42529;

XX

DT 01-OCT-2001 (first entry)

XX

DE PCR primer used to amplify pyrophosphatase-1 (PPase-1) cDNA.

XX

KW Pyrophosphatase stress-related protein; PPSRP; pyrophosphatase-1;

KW PPase-1; stress-tolerance; transgenic plant; environmental stress;

KW drought; salinity; PCR primer; ss.

XX

OS Physcomitrella patens.

XX

PN WO200145494-A2.

XX

PD 28-JUN-2001.

XX

PF 22-DEC-2000; 2000WO-US035100.

XX

PR 22-DEC-1999; 99US-0171745P.

XX

PA (BADI) BASF PLANT SCI GMBH.

XX

PI Henkes S, Chen R, Van Thielien N, Da Costa E SilvaO;

XX

WPI; 2001-475787/51.

XX

Novel pyrophosphatase stress-related protein and nucleic acids for

XX conferring increased drought, cold and/or salt tolerance to plants.

XX

Example 8; Page 52; 73pp; English.

XX

CC PCR primers AAH42529-30 were used to amplify cDNA encoding a plant

CC pyrophosphatase stress-related protein (PPSRP) in transgenic plants.

CC PPSRP is a pyrophosphatase-1 (PPase-1). PPSRP is useful for increasing

CC stress-tolerance in plants, and is obtained from Physcomitrella patens.

CC PPSRP coding nucleic acid is useful for producing a transgenic plants

CC with increased tolerance to environmental stress, including drought,

CC salinity or temperature, as compared to a wild type variety of the plant.

CC PPSRP nucleic acid molecules, proteins, vectors and host cells are useful

CC for identification and mapping of genomes of P. patens and related

CC organisms, identification and localization of P. patens sequences of

CC interest, evolutionary and protein structural studies, determination of

CC PPSRP regions required for function, modulation of a PPSRP activity,

CC metabolism of one or more cell functions, transmembrane transport of one

CC or more compounds and stress resistance

XX

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 574 CGTGTACGCTATCT 588
 DB 19 CGTGTACGCTATCT 5

RESULT 2326
 AAD41542
 ID AAD41542 standard; DNA; 20 BP.
 AC
 AAD41542;
 XX
 DT 30-OCT-2002 (first entry)
 DE Cystatin M gene specific reverse RT-PCR primer.

XX Marker; vitamin D analogue; antiproliferative; cancer; osteodystrophy;
 KW multiple sclerosis; osteoporosis; osteomalacia; hyperparathyroidism;
 KW genoprotective; epidermal wound; chemoprotective; DNA repair mechanism;
 KW cytotatic; psoriasis; neuroprotective; vulnery; RT-PCR; primer; ss.

XX Unidentified.

XX WO200244403-A2.

XX 06-JUN-2002.

XX 28-NOV-2001; 2001WO-CA001689.

XX 29-NOV-2000; 2000US-0253746P.

XX 02-MAY-2001; 2001US-0287729P.

XX (UYMC-) UNIV MCGILL.

XX White JH;

XX WPI; 2002-537458/57.

XX Novel marker for testing analogs of vitamin D expected to be effective in
 PT reducing aberrant activity of vitamin D-responsive cell, comprises gene
 PT pertinent to action of vitamin D for testing the analogs.

XX Example 2; Page 48; 89pp; English.

XX The invention relates to a marker for testing analogues of vitamin D
 CC expected to be effective in reducing aberrant activity of vitamin D-
 CC responsive cell, comprises at least one gene pertinent to the action of
 CC vitamin D for testing the analogues and determining analogues capable of
 CC regulating the gene, and is indicative of a chemopreventive or
 CC chemotherapeutic agent. The invention is useful for testing analogues of
 CC vitamin D expected to be effective in reducing aberrant activity of
 CC vitamin D-responsive cell or for testing analogues of vitamin D suspected
 CC to have antiproliferative activity. The invention is useful for reducing
 CC aberrant activity of vitamin D-responsive cell, and for treating a
 CC disorder characterised by an aberrant activity of vitamin D-responsive
 CC cell, where the disorder is selected from cancer, psoriasis, multiple
 CC sclerosis, osteoporosis, osteodystrophy, osteomalacia and
 CC hyperparathyroidism. The invention is useful for identifying regulated
 CC target genes correlated with the antiproliferative effect of vitamin D
 CC and its analogues. The invention is useful for protecting against in vivo
 CC DNA damage, for inducing in vivo DNA repair mechanisms in a mammal, or
 CC for reducing or preventing DNA damage to the skin of a mammal, preferably
 CC human. The invention is useful as a genoprotective or chemoprotective
 CC agent. The invention is useful as a marker for the activity of DNA repair
 CC mechanisms. The invention is useful for testing compounds susceptible of
 CC inhibiting an enzyme which metabolises 1,25-dihydroxyvitamin D3. The
 CC invention is useful for treating epidermal wounds. The present sequence
 CC is cystatin M gene specific RT-PCR primer

XX Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAAA 780
 DB 6 CACAAGGACCTCAAA 20

RESULT 2327
 AAD41116
 ID AAD41116 standard; DNA; 20 BP.
 XX
 AC AAD41116;
 XX
 DT 30-OCT-2002 (first entry)
 DE Primer ON-DinB1-F3 used for DNA sequencing.

XX Tumour necrosis-factor; TNF; promoter; autoimmune disorder; cancer;
 KW therapy; primer; ss.

XX Unidentified.

XX WO200246433-A2.

XX 13-JUN-2002.

XX 07-DEC-2001; 2001WO-EP014412.

XX 08-DEC-2000; 2000US-0254649P.

XX (SAUS/) SAUS J.

XX Saus J;

XX WPI; 2002-519670/55.

XX Novel tumor necrosis-factor inducible promoter useful for identifying
 PT candidate compounds for treating/preventing autoimmune disorders/cancer,
 PT or for identifying promoters that are regulated by tumor necrosis factor.

XX Example; Page 18; 95pp; English.

XX The invention relates to a tumour necrosis-factor TNF inducible promoter.
 CC The invention is useful for identifying candidate TNF inducible promoters
 CC by aligning a test sequence consisting of a nucleic acid sequence with a
 CC comparison sequence selected from the invention, using a gap opening
 CC penalty of 50 and a gap extension penalty of 3 to define a test
 CC alignment, shuffling the nucleic sequence of the test sequence at least
 CC one hundred times, while maintaining its length and composition, to
 CC produce a series of randomised sequences, aligning the randomised
 CC sequences with the comparison sequence using a gap opening penalty of 50
 CC and a gap extension penalty of 3, to produce a series of randomised
 CC alignments, determining an average alignment quality of the randomised
 CC alignments, where the average alignment quality of the randomised
 CC alignments represent an alignment expected by chance, comparing the test
 CC alignment with the average alignment quality of the randomised alignments
 CC and identifying a test alignment with a probability value of less than
 CC 0.05 that the alignment is obtained by chance as a candidate TNF
 CC inducible promoter. The invention is useful for identifying candidate
 CC compounds for treating or preventing autoimmune disorders or cancer. The
 CC present sequence is a primer used in the exemplification of the invention

XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 537 CCCATCTTTGACAA 551
 ||||| ||||| ||||| |||||

Db 4 CCCCAACTTGACAA 18

RESULT 2328
ABN89213
ID ABN89213 standard; DNA; 20 BP.
XX
AC ABN89213;
XX
DT 29-AUG-2002 (first entry)
XX
DE Human Talin antisense phosphorothioate oligonucleotide SEQ ID NO:26.
XX
KW Human; Talin; antimicrobial; antiinflammatory; cytostatic; inhibitor;
KW antisense gene therapy; infection; inflammation; Talin inhibitor; tumour;
KW antisense oligonucleotide; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT FT *tag= b
FT FT /mod_base= OTHER
FT FT /note= "phosphorothioate backbone"
FT FT modified_base 1..5
FT FT *tag= a
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT FT modified_base 16..20
FT FT *tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US6372492-B1.
XX
PD 16-APR-2002.
XX
PF 30-OCT-2000; 2000US-00702251.
XX
PR 30-OCT-2000; 2000US-00702251.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowser LM;
XX
DR WPI; 2002-470102/50.
XX
PT New antisense compound useful for inhibiting expression of Talin and for
PT preventing or delaying infection, inflammation or tumor formation.
XX
PS Claim 14; Col 41; 46pp; English.
XX
CC The present invention describes an antisense compound (I), 16 to 30 bases
CC in length targeted to specific base regions of a nucleic acid encoding
CC human Talin. Also described: (a) an antisense compound up to 30 bases in
CC length which inhibits the expression of human Talin; (b) a composition
CC (II) comprising (I) or (a); and (c) inhibiting the expression of human
CC Talin in human cells or tissues comprising contacting the cells or
CC tissues in vitro with (I) or (a). (I) has antimicrobial, antiinflammatory
CC and cytostatic activities, and can be used in antisense gene therapy and
CC as a Talin expression inhibitor. (I) can be used to inhibit the
CC expression of human Talin in human cells or tissues; to prevent or delay
CC infection, inflammation or tumour formation; and in diagnostics,
CC therapeutics, prophylaxis, and in research reagents and kits. The present
CC sequence represents a human Talin antisense chimeric phosphorothioate
CC oligonucleotide, having 2'-methoxyethyl (2'-MOE) wings of 5 nucleotides
CC at the 5' and 3' ends and a 10 nucleotide deoxy gap in the middle, which
CC is used in an example from the present invention
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1628 GCCCAGCAGCAGC 1642
Db 6 GCTCCAGCAGCAGC 20

RESULT 2330
AAD40926/c

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1537 AAGGAGCCAGCCTT 1551
Db 1 AAGGAAGCCAGCCTT 15

RESULT 2329
AAL40334
ID AAL40334 standard; DNA; 20 BP.
XX
AC AAL40334;
XX
DT 19-SEP-2002 (first entry)
XX
DE Human caspase 6 antisense inhibition related oligo SEQ ID NO 53.
XX
KW Muscular; cytostatic; nootropic; neuroprotective; ophthalmological;
KW antilipaemic; osteopathic; caspase 6; Rieger's syndrome; bone metabolism;
KW ataxia telangiectasia; hyperproliferative disorder; cholesterol disorder;
KW haematopoietic disorder; cancer; neurological; Alzheimer's disease;
KW apoptotic; human; ds.
XX
OS Homo sapiens.
XX
PN WO200229066-A1.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US030871.
XX
PR 04-OCT-2000; 2000US-00679299.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Brown-Driver VL, Zhang H, Watt AT;
XX
DR WPI; 2002-471315/50.
XX
PT An antisense oligonucleotide of 8 to 50 nucleotides in length that
PT inhibits caspase 6, is useful for treating Rieger's syndrome.
XX
PS Example 15; Page 89; 141pp; English.
XX
CC The invention relates to an antisense oligonucleotide compound of 8 to 50
CC nucleotides in length that is targeted to a nucleic acid molecule
CC encoding caspase 6, where the oligonucleotide specifically hybridises
CC with and inhibits the expression of caspase 6. The oligonucleotide of the
CC invention specifically hybridises to and inhibits expression of caspase 6
CC in cells or tissues. The oligonucleotides can be administered
CC therapeutically or prophylactically to treat an animal having a disease
CC or condition associated with caspase 6, such as Rieger's syndrome or
CC ataxia telangiectasia, hyperproliferative disorder, a haematopoietic
CC disorder, a bone metabolism or cholesterol disorder, various types of
CC cancer, neurological conditions such as Alzheimer's disease and other de-
CC regulated apoptotic pathological conditions. This polynucleotide sequence
CC represents a human caspase 6 oligonucleotide relating to the invention.
CC NOTE: This phosphorothioate oligonucleotide sequence has 2'-MOE wings and
CC a deoxy gap
XX
SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1628 GCCCAGCAGCAGC 1642
Db 6 GCTCCAGCAGCAGC 20

RESULT 2330
AAD40926/c

ID AAD40926 standard; DNA; 20 BP.
XX
AC AAD40926;
XX
XX 30-OCT-2002 (first entry)
DT
XX Human HDAL antisense oligonucleotide ISIS #123707.
DE
XX Human; histone deacetylase 1; HDAL; enzyme; hyperproliferative condition;
KW viral infection; prophylactic; inflammation; phosphorothioate backbone;
KW tumour; antisense; cytostatic; virucide; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 6
FT /*tag= d
FT /mod_base= m5c
FT modified_base 9
FT /*tag= e
FT /mod_base= m5c
FT modified_base 11..12
FT /*tag= f
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 18
FT /*tag= g
FT /mod_base= m5c
FT modified_base 20
FT /*tag= h
FT /mod_base= m5c
XX WO200250244-A2.
XX
XX 27-JUN-2002.
XX
XX 07-DEC-2001; 2001WO-US046518.
XX
XX 19-DEC-2000; 2000US-00745167.
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Wyatt JR;
XX
XX WPI; 2002-519880/55.
XX
XX Antisense compounds targeted against polynucleotides encoding Histone
XX deacetylase 1 useful for treating hyperproliferative conditions, e.g.
XX cancer of hematopoietic, lymphoid, myeloid or breast, or a viral
XX infection.
XX
XX Claim 3; Page 94; 120pp; English.
XX
XX The present invention relates to antisense compounds, compositions and
XX methods for modulating the expression of Histone deacetylase 1 (HDAL).
XX Sequences of the invention are useful for inhibiting the expression of
XX HDAL in cells or tissues and for treating an animal having a disease or
XX condition associated with HDAL e.g., hyperproliferative condition, which
XX is cancer of haematopoietic, lymphoid, myeloid or breast or a condition
XX resulting from a viral infection. Antisense compounds either alone or in
XX combination with other antisense compounds or therapeutics can be used as

CC tools in differential and/or combinatorial analyses to elucidate the
CC expression patterns of a portion or the entire complement of genes
CC expressed within cells and tissues. They are commonly used as research
CC reagents and diagnostics. They may also be useful prophylactically such
CC as to prevent or delay infection, inflammation or tumour formation. The
CC present DNA sequence is an antisense oligonucleotide targetted to human
CC HDAL DNA
XX
SQ Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 844 GAGTACCTGGACAAG 858
DB 20 GAGTACCTGGACAAG 6
RESULT 2331
ABZ31413
ID ABZ31413 standard; DNA; 20 BP.
XX
AC ABZ31413;
XX
DT 30-JAN-2003 (first entry)
XX
DE Candida albicans GRACE strain PCR primer SEQ ID NO 5632.
XX
XX Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
XX signal transduction; DNA replication; cell division; growth;
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
XX Candida albicans.
XX WO200253728-A2.
XX
XX 11-JUL-2002.
XX
XX 26-DEC-2001; 2001WO-US049486.
XX
XX 29-DEC-2000; 2000US-0259128P.
XX 20-FEB-2001; 2001US-00792024.
XX 22-AUG-2001; 2001US-0314050P.
XX
XX (ELIT-) ELITRA PHARM INC.
XX
XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
XX WPI; 2002-566694/60.
XX
XX Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.
XX
XX Claim 36; SEQ ID NO 5632; 167pp + Sequence Listing; English.
XX
XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous
XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal
XX cells in which both alleles of a gene are modified. The diploid fungal
XX cells having both alleles modified are useful for identifying a gene that
XX is essential to the survival or growth of a fungus, a gene that
XX contributes to the virulence and/or pathogenicity of a fungus, a gene
XX that contributes to the resistance of a diploid fungus to an antifungal
XX agent, an antifungal agent that inhibits the growth of a diploid fungus
XX and for identifying a therapeutic agent for treatment of a mammalian
XX disease. (M1) is useful for identifying a compound which modulates the
XX activity of a gene product, preferably enzymatic activity, carbon

CC compound catabolism, biosynthetic, transporter, transcriptional,
 CC translational, signal transduction, DNA replication and cell division
 CC activity. The method is useful for identifying a compound having the
 CC ability to inhibit growth or proliferation of C. albicans cells and for
 CC treating infection by C. albicans. The present sequence is that of a PCR
 CC primer used in the method of the invention. Note: The sequence data for
 CC this patent is not represented in the printed specification but is based
 CC on sequence information supplied to Derwent by the European Patent Office

XX Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 656 CGGTCTACAAAGGCA 670
 |||||
 Db 3 CGGTCTACACGGCA 17

RESULT 2332
 AAL48224/C
 ID AAL48224 standard; DNA; 20 BP.

XX AAL48224;

XX 03-OCT-2002 (first entry)

DE Human IL-10 coding sequence PCR primer #1.

XX Human; autoimmune disease; systemic lupus erythematosus; SLE;
 KW rheumatoid arthritis; Sjogren's disease; polymyositis; dermatomyositis;
 KW histone hyperacetylating agent; immunosuppressive; dermatological;
 KW antiinflammatory; antirheumatic; antiarthritic; PCR; primer; ss.

OS Homo sapiens.

XX WO200255017-A2.

XX 18-JUL-2002.

XX 19-NOV-2001; 2001WO-US043871.

XX 21-NOV-2000; 2000US-00718195.

XX (UYWA-) UNIV WAKE FOREST.

XX Kammer GM, Mishra N;

XX WPI; 2002-566708/60.

XX Use of a histone hyperacetylating agent in the treatment of an autoimmune disease.

XX Example 1; Page 16; 31pp; English.

XX The present invention relates to the use of histone hyperacetylating agents in the treatment of autoimmune diseases. In particular, they can be used to treat systemic lupus erythematosus (SLE), rheumatoid arthritis, Sjogren's disease, polymyositis and dermatomyositis. The present sequence is a PCR primer described in the exemplification of the invention

XX Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 38 AGCAGGAGGACCCAG 52
 |||||
 Db 19 AGTCAGGAGGACCCAG 5

RESULT 2333
 AB197181/C
 ID AB197181 standard; DNA; 20 BP.

XX AB197181;

XX 16-FEB-2002 (first entry)

XX Capture oligonucleotide Zip ID#4268 oligo #9.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.

OS Synthetic.

XX WO200179548-A2.

XX 25-OCT-2001.

XX 04-APR-2001; 2001WO-US010958.

XX 14-APR-2000; 2000US-0197271P.

XX (CORR) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX WPI; 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.

XX Example 5; Fig 29; 300pp; English.

XX The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to AB197546 represent oligonucleotide sequences used in the exemplification of the present invention

XX Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 669 CAAAAGCAGGCTCAC 683
 |||||
 Db 19 CAAAAGCAGGCGAC 5

RESULT 2334

ABK49768/C
ID ABK49768 standard; DNA; 20 BP.
XX
AC ABK49768;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human atopic dermatitis related cDNA 2298-09 real time PCR primer #2.
XX
KW Atopic dermatitis; human; ss; differential display; primer; PCR;
KW eosinophil; allergic disease; anti-allergic; dermatological; TagMan;
KW 2298-09.
XX
OS Homo sapiens.
XX
FN WO200226962-A1.
XX
PD 04-APR-2002.
XX
PF 21-SEP-2001; 2001WO-JP008247.
XX
PR 26-SEP-2000; 2000JP-00293021.
XX
PA (GENO-) GENOX RES INC.
PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
PI Sugita Y, Hashida R, Ogawa K, Fujishima T, Nagasu T, Saito H;
XX
XX WPI; 2002-330097/36.
DR
XX
XX Examining allergic diseases by differential display of genes showing
PT different expression particularly increase in remission stage in
PT eosinophils in patients.
XX
XX Example 1; Page 60; 74pp; Japanese.

XX This invention relates to gene sequences that are differentially
CC expressed in eosinophils from patients with atopic dermatitis in the
CC increment stage as compared with those in the remission stage. These
CC sequences are used in a novel method for examining allergic diseases
CC comprising determining the expression levels of these genes and comparing
CC the expression level with that in the eosinophils of a healthy
CC individual. The method of the invention may have anti-allergic or
CC dermatological activities. The method can be used to diagnose allergic
CC diseases particularly atopic dermatitis, and may also be used to screen
CC candidate compounds for remedies. The method of the invention can be
CC performed in high throughput, at low cost. The present sequence
CC represents a real time PCR primer specific for the differentially
CC expressed atopic dermatitis related cDNA sequence 2298-09. This primer is
CC used to quantify expression of the 2298-09 gene of the invention

XX Sequence 20 BP; 3 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 407 CTCACAGTGAGATGC 421

Db 16 CTCACAGTGAGATGC 2

RESULT 2335

ABK69328
ID ABK69328 standard; DNA; 20 BP.
XX
AC ABK69328;
XX
DT 15-JUL-2002 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide #80 for caspase 9 inhibition.

XX Antisense compound; caspase 9; C9; hyperproliferative disorder; stroke;
KW haematopoietic disorder; cholesterol disorder; bone metabolism disorder;
KW brain injury; neurodegenerative disease; infection; inflammation; tumour;
KW phosphorothioate backbone linkage; 2'-methoxyethyl; 2'-MOE; ss.
XX
OS Mus musculus.
OS Synthetic.
OS Chimeric.
XX
XX Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate nucleotides, all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO200222641-A1.
XX
XX 21-MAR-2002.
XX
XX 10-SEP-2001; 2001WO-US028233.
XX
XX 11-SEP-2000; 2000US-00659845.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Zhang H, Watt AT;
XX
XX WPI; 2002-351874/38.
XX
XX New antisense oligonucleotide which modulates expression of caspase 9,
XX useful to treat tumor, inflammation or to prevent infection in humans.
XX
XX Claim 26; Page 94; 145pp; English.
XX
XX The present invention relates to a new antisense compound targeted to a
XX nucleic acid molecule encoding caspase 9 (C9). The compound specifically
XX hybridises with and inhibits the expression of caspase 9. The invention
XX also describes an antisense compound that specifically hybridises with an
XX 8 nucleotide portion of an active site of the nucleic acid. The invention
XX is useful for inhibiting the expression of C9 in cells or tissues and is
XX also useful for treating an animal having a disease or condition
XX associated with C9, including a hyperproliferative, haematopoietic or
XX cholesterol disorder, bone metabolism disorder, stroke, brain injury or
XX neurodegenerative disease. The compound is commonly useful as a research
XX and diagnostics reagent. It is also useful to distinguish between
XX functions of various members of a biological pathway. The invention is
XX also be useful prophylactically e.g. to prevent or delay infection,
XX inflammation or tumour formation. The antisense compound of the invention
XX is often preferred over native form because of enhanced cellular uptake,
XX enhanced affinity for nucleic acid target and increased stability in
XX presence of nucleases. The present nucleic acid sequence represents one
XX of a collection (ABK69249-ABK69396) of chimeric phosphorothioate
XX oligonucleotides having 2'-methoxyethyl (2'-MOE) wings. This sequence was
XX used in the methods of the invention for inhibition of caspase 9
XX
XX Sequence 20 BP; 3 A; 9 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 733 GCACCTGCACCGCC 747

|||||

```

Db      1 GCACCTGCATGCC 15
RESULT 2336
ABT03951
ID      ABT03951 standard; DNA; 20 BP.
XX
AC      ABT03951;
XX
DT      18-SEP-2002 (first entry)
XX
DE      Human pol kappa 76 DNA polymerase sequencing primer #57.
XX
KW      Human; pol kappa 76; Goodpasture antigen binding protein; GPBP;
KW      chromosome 5q12-13; apoptosis; autoimmune disorder; cancer; cytostatic;
KW      immunosuppressive; PCR; primer; sequencing; ss.
XX
OS      Homo sapiens.
XX
FN      WO200246378-A2.
XX
PD      13-JUN-2002.
XX
PF      07-DEC-2001; 2001WO-EP014409.
XX
PR      08-DEC-2000; 2000US-0254649P.
XX
PA      (SAUS/) SAUS J.
XX
PI      Saus J;
XX
DR      WPI; 2002-537563/57.
XX
PT      Novel isolated pol kappa76 polypeptide, a 76 kDa alternatively spliced
PT      variant of DNA polymerase kappa, useful as target for treating a patient
PT      with autoimmune disorder or cancer.
XX
PS      Example; Page 17; 90pp; English.
XX
CC      The present invention provides the protein and coding sequences of human
CC      DNA polymerase pol kappa 76. The gene is found on human chromosome 5q12-
CC      13, in a head-to-head arrangement with the Goodpasture antigen binding
CC      protein (GPBP). The detection of the coding sequence can be used for
CC      diagnosing an autoimmune condition and identifying cells undergoing
CC      apoptosis, and the sequences can be used in the treatment of autoimmune
CC      diseases and cancer. The present sequence is a sequencing primer
CC      described in the invention
XX
SQ      Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
      Query Match 0.8%; Score 13.4; DB 1; Length 20;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      537 CCCCATCTTTCACAA 551
      ||||| |||||
      4 CCCCACTTTGACAA 18

Db
RESULT 2337
AAD41680/c
ID      AAD41680 standard; DNA; 20 BP.
XX
AC      AAD41680;
XX
DT      30-OCT-2002 (first entry)
XX
DE      Human IL-12 p35 subunit DNA antisense oligonucleotide ISIS #138990.
XX
KW      Human; interleukin-12; IL-12 p35 subunit; therapeutic; infection; tumour;
KW      inflammation; antisense therapy; antisense; phosphorothioate backbone;
KW      prophylactic; ss.
XX
OS      Homo sapiens.
XX
SY      Synthetic.
XX
Key     modified_base
FT      1..20
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate backbone"
FT      1..5
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (MOE) residues"
FT      5
FT      /tag= d
FT      /mod_base= m5c
FT      8
FT      /tag= e
FT      /mod_base= m5c
FT      11
FT      /tag= f
FT      /mod_base= m5c
FT      16..20
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (MOE) residues"
FT      16
FT      /tag= g
FT      /mod_base= m5c
FT      19
FT      /tag= h
FT      /mod_base= m5c
XX
PN      US6399379-B1.
XX
PD      04-JUN-2002.
XX
PF      07-MAY-2001; 2001US-00851520.
XX
PR      07-MAY-2001; 2001US-00851520.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Freier SM;
XX
DR      WPI; 2002-535980/57.
XX
PT      Novel antisense compounds targeted to nucleic acids encoding interleukin-
PT      12 p35 subunit, useful for modulating interleukin-12 p35 subunit
PT      expression and treating diseases associated with expression of the
PT      subunit in humans.
XX
PS      Claim 3; Col 47-48; 44pp; English.
XX
CC      The present invention relates to novel antisense oligonucleotides which
CC      specifically hybridise with specific regions of nucleic acids encoding
CC      interleukin-12 (IL-12) p35 subunit and inhibit the expression of human IL
CC      -12 p35 subunit. Sequences of the invention are useful for inhibiting the
CC      expression of human IL-12 p35 subunit in human cells or tissues and for
CC      treating animals, particularly humans suspected of having or being prone
CC      to diseases or conditions associated with expression of IL-12 p35
CC      subunit. They are useful for diagnostics, therapeutics and as research
CC      reagent, e.g. prophylactically to prevent or delay infection, tumour
CC      formation or inflammation. Sequences of the invention are useful for
CC      antisense therapy. The present sequence is an antisense oligonucleotide
CC      targeted to human IL-12 p35 subunit DNA. This sequence is used in the
CC      exemplification of the invention
XX
SQ      Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
      Query Match 0.8%; Score 13.4; DB 1; Length 20;
      Best Local Similarity 93.3%; Pred. No. 1.2e+03;
      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 337 GAGACTTGAAGATG 351
||| ||||| ||||| |||||
DB 19 GAAGACTTGAAGATG 5

RESULT 2338
ADG90476
ID ADG90476 standard; DNA; 20 BP.
XX
AC ADG90476;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human talin phosphorothioate antisense oligonucleotide, SEQ ID NO:26.
XX
KW Human; talin; cellular adhesion; muscle strength; cardiac function;
KW cardiomyocyte; platelet; prostate; androgen downregulation;
KW prostate cancer; talin-related disorder;
KW cellular adhesion-related disorder; expression inhibition;
KW antisense therapy; phosphorothioate; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytosine nucleotides are 5-methylcytosines"
XX
PN WO200268446-A1.
XX
PD 06-SEP-2002.
XX
PF 30-OCT-2001; 2001WO-US048435.
XX
PR 22-FEB-2001; 2001US-00791942.
XX
PA (ISTS-) ISIS PHARM INC.
PA (BOEH) BOEHRINGER INGELHEIM PHARM INC.
XX
PI Bennett CF, Rothlein R, Kishimoto TK, Cowse LM;
XX WPI; 2002-691651/74.
XX
DR New antisense oligonucleotides targeted to nucleic acid molecules
XX encoding human Talin, useful for inhibiting the expression of human Talin
XX and for treating a human having a disease or condition associated with
XX Talin.
XX
PS Example 15; SEQ ID NO 26; 114pp; English.
XX
CC Sequences ADG90460-ADG90539 represent phosphorothioate targeted to the
CC human talin gene, which inhibit its expression. The antisense were
CC designed to target different regions of human talin RNA, and were
CC analysed for their effect on talin expression by quantitative real-time
CC PCR. Talin is a cytoplasmic protein which links cytoskeletal proteins
CC such as actin, myosin and vinculin to integrins, thereby linking the
CC extracellular matrix to other cells. It is thought to be involved in the
CC regulation of cellular adhesion and cell morphology. Talin is highly
CC expressed in platelets, and may play a role in platelet adhesion as its
CC subcellular distribution differs between resting non-adhesive platelets
CC and activated adhesive platelets. It could also play a major role in
CC determining muscle strength and cardiac function as it has been found to
CC participate in the transmission of contractile force to the extracellular
CC matrix in cardiomyocytes, and exhibits mechanical loading-dependent
CC expression at myotendinous junctions. The expression of talin is
CC downregulated by androgens in prostate tissues, a phenomenon known to
CC contribute to the development of prostate cancer. The oligonucleotides of
CC the invention are useful for diagnosis, prevention and treatment of talin
CC -related disorders, such as those related to cellular adhesion. The

CC present sequence represents a human c-Ha-ras phosphorothioate antisense
CC oligonucleotide used as a positive control in determining optimal
CC oligonucleotide concentration for a particular cell line.
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1537 AAGAGGCGAGCCTT 1551
||||| ||||| ||||| |||||
DB 1 AAGAGGCGAGCCTT 15

RESULT 2339
ACA97213
ID ACA97213 standard; DNA; 20 BP.
XX
AC ACA97213;
XX
DT 11-AUG-2003 (first entry)
XX
DE Vpr-driven construct associated primer #46.
XX
KW PCR; primer; Vpr; ss; immune response; immunocompromise; HIV; cancer;
KW gene therapy.
XX
OS Unidentified.
XX
PN US2003017137-A1.
XX
PD 23-JAN-2003.
XX
PF 22-JUL-1998; 98US-00120286.
XX
PR 22-JUL-1998; 98US-00120286.
XX
PA (ALFI/) ALFIERI C.
PA (TANN/) TANNER J.
PA (ROUX/) ROUX P.
XX
PI Alfieri C, Tanner J, Roux P;
XX WPI; 2003-438926/41.
XX
DR Novel DNA or RNA construct for increasing immune response of warm-blooded
PT animal, has vpr activated promoter, DNA segment encoding interleukin 2
PT and secretory DNA encoding signal peptide functional in mammary cells.
PS Disclosure; Page 16; 28pp; English.
XX
CC The invention relates to a DNA or RNA construct capable of expressing
CC interleukin (IL)-2 in a warm-blooded animal or biological preparation,
CC comprising a vpr activated promoter, a transcribable DNA segment coding
CC for IL-2 and a secretory DNA encoding for a signal peptide functional in
CC mammary cells and operably linked between the promoter and the DNA
CC segment to facilitate secretion of IL-2. The construct is useful for
CC increasing the immune response of a warm-blooded animal or biological
CC preparation, by introducing the construct in stem cells, antigen
CC presenting cells or immune cell leukocytes, fibroblasts and epithelial
CC cells, of the warm-blooded animal or biological preparation to obtain a
CC transfected cell populations and administering a pharmaceutically
CC effective amount of the transfected cell populations to the warm-blooded
CC animal or biological preparation. The warm-blooded animal is an
CC immunocompromised patient. The method is useful for stimulating immune
CC response in immunocompromised patients affected with HIV, cancer and
CC other immunocompromised patients. The present sequence represents a vpr-
CC driven construct associated primer. Note: The present sequence is
CC displayed in the sequence listing but no further reference is made to it
CC in the specification
XX
SQ Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAAA 780
| | | | | | | | | |
DB 6 CACAAGGACCTCAAA 20

RESULT 2340
ABT34199/c
ID ABT34199 standard; DNA; 20 BP.
XX
AC ABT34199;
XX
DT 12-JUN-2003 (first entry)
XX
DE Mouse short heterodimer partner-1 expression oligo SEQ ID NO 74.
XX
KW Antiarteriosclerotic; cardiant; vasotropic; antiinfective; cytostatic;
KW antiinflammatory; inhibitor; antisense gene therapy; atherosclerosis;
KW short heterodimer partner-1; abnormal; lipid; cholesterol metabolism;
KW cardiovascular disease; infection; inflammation; tumour formation; mouse;
XX antisense; ds.
XX
OS Unidentified.
XX
PN WO2003012033-A2.
XX
PD 13-FEB-2003.
XX
PF 17-JUL-2002; 2002WO-US023245.
XX
PR 31-JUL-2001; 2001US-00919197.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2003-248161/24.
XX

New antisense oligonucleotide targeted to a nucleic acid encoding short heterodimer partner-1, useful for treating diseases involving abnormal lipid or cholesterol metabolism, e.g atherosclerosis or cardiovascular diseases.

Claim 3; Page 95; 121pp; English.
This invention relates to a novel compound of 8 - 50 nucleobases in length targeted to a nucleic acid molecule encoding a short heterodimer partner-1. The novel compound specifically hybridizes with a nucleic acid molecule encoding the short heterodimer partner-1, and inhibits the expression of the nucleic acid molecule. The compound, and a composition comprising it are useful for treating a disease or condition associated with the short heterodimer partner-1, particularly a condition involving abnormal lipid or cholesterol metabolism such as atherosclerosis or a cardiovascular disease. They are also useful in research and diagnostics for modulating the expression of short heterodimer partner-1. They can also be useful prophylactically in preventing or delaying infection, inflammation or tumour formation. This polynucleotide sequence represents a mouse antisense oligo relating to the heterodimer partner-1 of the invention

Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 169 CGAGGTGCGCAGGC 183
| | | | | | | | | |
DB 19 CGAGGTGCGCAGGC 5

RESULT 2341
ABX78139/c
ID ABX78139 standard; DNA; 20 BP.
XX
AC ABX78139;
XX
DT 16-APR-2003 (first entry)
XX
DE Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100802.
XX
KW p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;
KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "nucleotides 1-5 & 16-20 are 2'-methoxyethoxy
FT (MOE) nucleotides, nucleotides 1-4 & 16-19 are linked
FT via phosphodiester linkages, nucleotides 6-15 are 2'-
FT deoxy- nucleotides, nucleotides 5-16 are linked via
FT phosphorothioate linkages, all C nucleotides are 5-
FT methyl cytosines"

US6448079-B1.
XX
PN 10-SEP-2002.
XX
PD 15-AUG-2000; 2000US-00640101.
XX
PF 06-APR-1999; 99US-00286904.
XX
PR (ISIS-) ISIS PHARM INC.
XX
PA Monia BP, Gaarde WA, Nero P, McKay R;
XX
PI WPI; 2003-089122/08.
XX
DR New antisense compound, useful for preparing a composition for
XX diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
XX arthritis.
XX
PS Example 5; Col 27-28; 44pp; English.
XX

This invention describes a novel antisense compound, which is 8-30 nucleobases in length targeted to a nucleic acid molecule encoding p38 mitogen-activated protein kinase (MAPK). The products of the invention have antiarthritic and antiinflammatory activity, can act as act as kinase inhibitors. The antisense compound is useful for preparing a composition for diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid arthritis or for use in antisense gene therapy. This sequence represents an antisense oligonucleotide used in a method to inhibit p38 MAPK

Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1638 GCAGCGGCTGAGGG 1652
| | | | | | | | | |
DB 15 GCAGCGGCTGAGGG 1

RESULT 2342
ABT43349
ID ABT43349 standard; DNA; 20 BP.

```

XX AC ABT43349;
XX DT 22-SEP-2003 (first entry)
XX DE Neuroblastoma-related DNA sequence #264.
XX KW Neuroblastoma; prognosis; ds; oligonucleotide.
XX OS Unidentified.
XX PN WO2002103017-A1.
XX PD 27-DEC-2002.
XX PF 30-MAY-2002; 2002WO-JP005295.
XX PR 31-MAY-2001; 2001JP-00163666.
XX PR 24-AUG-2001; 2001JP-00255260.
XX PA (CHIB-) CHIBA PREFECTURE.
XX PA (HISM ) HISAMITSU PHARM CO LTD.
XX PI Nakagawara A;
XX WPI; 2003-167523/16.
XX Nucleic acids isolated from neuroblastoma showing enhanced expression in
XX human neuroblastoma with good prognosis, useful in clarifying good/poor
XX prognosis of neuroblastoma and providing genetic data.
XX Example 5; Page 25; 444pp; Japanese.
XX The invention comprises DNA sequences that show enhanced expression in
XX human neuroblastoma with good prognosis. The DNA sequences of the
XX invention are useful in clarifying good/poor prognosis of neuroblastoma.
XX The present DNA sequence was used in the exemplification of the invention
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAGAC 1313
Db 6 CCAGGAGTTCAGAC 20

RESULT 2343
ABX95014/C
ID ABX95014 standard; DNA; 20 BP.
XX AC ABX95014;
XX DT 05-JUN-2003 (first entry)
XX DE Human MAGE-C2 gene amplification primer S115.
XX TRAP; ss; tumour rejection antigen precursor; cytolytic T-cell; CTL;
XX tumour; seminoma; bladder transitional-cell carcinoma; NSCLC; adaptor;
XX head-and-neck squamous-cell carcinoma; breast carcinoma; sarcoma;
XX cutaneous melanoma; non-small cell lung cancer; PCR; primer; MAGE-C2;
XX human.
XX OS Homo sapiens.
XX PN US2002176865-A1.
XX PD 28-NOV-2002.
XX PF 01-MAR-2002; 2002US-00085108.
XX PR
XX PA

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PR 25-APR-1997; 97US-00845528.
PR 24-APR-1998; 98US-00066281.
PR 17-DEC-1999; 99US-00468433.
PR 09-FEB-2000; 2000US-00501104.
XX (LUCA/) LUCAS S.
XX (BOON/) BOON-FALLEUR T.
XX Lucas S, Boon-Falleur T;
XX WPI; 2003-328468/31.
XX Novel isolated nucleic acid encoding tumor rejection antigen precursor
XX MAGE-C3, MAGE-B5, or MAGE-B6, useful as diagnostic probes to determine
XX presence of abnormal e.g., tumor cells expressing MAGE-C1, MAGE-B5 or
XX MAGE-B6.
XX Example 11; Page 12; 59pp; English.
XX The invention relates to an isolated nucleic acid molecule which encodes
XX a tumour rejection antigen precursor (TRAP) having an amino acid sequence
XX of a TRAP encoded by a fully defined MAGE-C3, MAGE-B5, or MAGE-B6
XX polynucleotide sequence. Also disclosed is a method which is useful for
XX determining presence of cytolytic T-cells specific for complexes of human
XX leukocyte antigen (HLA) and a peptide derived from the nucleic acid in a
XX cytotoxic T-lymphocyte (CTL)-containing sample. The nucleic acid is
XX useful as a diagnostic probe to determine the presence of abnormal
XX (tumour) cells such as seminoma, bladder transitional-cell carcinoma,
XX head-and-neck squamous-cell carcinoma, breast carcinoma, sarcoma,
XX cutaneous melanoma or non-small cell lung cancer (NSCLC) which express
XX MAGE-C1, MAGE-B5 or MAGE-B6. The nucleic acid is useful for diagnosing a
XX disorder characterised by expression of MAGE-C1, MAGE-B5 or MAGE-B6 TRAPs
XX or tumour rejection antigens (TRAs). The present sequence represents the
XX human MAGE-C2 gene amplification primer S115
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 CCGCAGAGATGCCA 1444
Db 15 CCGCAGATGATGCCA 1

RESULT 2344
AAD52514
ID AAD52514 standard; DNA; 20 BP.
XX AC AAD52514;
XX DT 02-MAY-2003 (first entry)
XX DE Arabidopsis thaliana gene amplifying reverse PCR primer #14.
XX TRAP; ss; tumour rejection antigen precursor; cytolytic T-cell; CTL;
XX tumour; seminoma; bladder transitional-cell carcinoma; NSCLC; adaptor;
XX head-and-neck squamous-cell carcinoma; breast carcinoma; sarcoma;
XX cutaneous melanoma; non-small cell lung cancer; PCR; primer; MAGE-C2;
XX human.
XX OS Arabidopsis thaliana.
XX PN WO2002090547-A1.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-AU000564.
XX PR 07-MAY-2001; 2001AU-00004821.
XX PA (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.

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PA (AGRE-) AGRESEARCH LTD.
XX Spangenberg G, Sawbridge TI, Ong EK, Emmerling M;
XX WPI; 2003-129183/12.
XX New isolated nucleic acid encoding ASP, A22, CYS, LEA, DHN or PRABA
PT proteins, useful as molecular genetic markers, and in modifying plant
PT and/or seed development and responses to stresses and adverse
PT environmental stimuli.
XX Example 6; Page 35; 231pp; English.
XX The invention relates to nucleic acid encoding abscisic acid-inducible
CC and stress responsive proteins (ASR and A22), stress-inducible cysteine
CC proteases (CYS), late embryogenesis abundant proteins (LEA), dehydrins
CC (DHN) and abscisic acid-induced protein kinases (PRABA). The invention
CC also relates to a method for modification of plant and seed development
CC and plant responses to stresses and stimuli. The invention is useful as
CC molecular genetic markers. The method is useful for modifying plant
CC response to an environmental stimulus, modifying plant tolerance to
CC abiotic, osmotic and/or temperature stresses, modifying seed dormancy
CC and/or germination, development, maturation, and modifying a plant
CC developmental process. They are also useful for modifying plant tolerance
CC and adaptation to stresses and adverse environmental stimuli. The
CC invention is also used in gene therapy. The present sequence is a PCR
CC primer used for amplifying Arabidopsis thaliana gene. This sequence is
CC used in the exemplification of the invention
XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1577 GCAGCGCAGCTTCC 1591
Db ||||| ||||| |||||
6 GCAGCGCAGCTTCC 20
RESULT 2345
ABT32516
ID ABT32516 standard; DNA; 20 BP.
XX AC ABT32516;
XX 08-MAY-2003 (first entry)
XX Neuroblastoma-related oligonucleotide #293.
XX Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
XX high malignancy.
XX Unidentified.
XX WO200297093-A1.
XX 05-DEC-2002.
XX 30-MAY-2002; 2002WO-JP005294.
XX 30-MAY-2001; 2001JP-00162775.
XX 24-AUG-2001; 2001JP-00255226.
XX (CHIB-) CHIBA PREFECTURE.
PA (HISM) HISAMITSU PHARM CO LTD.
XX Nakagawara A;
XX WPI; 2003-140476/13.
XX Nucleic acids having higher expression in human neuroblastoma with poor
PT prognosis for diagnostic prediction of neuroblastoma prognosis.

XX Example 5; Page 28; 111pp; Japanese.
XX The invention comprises nucleic acids that show increased expression in
CC human neuroblastomas with poor prognosis over those with a good
CC prognosis. The nucleic acids of the invention are useful as a tool for
CC distinguishing neuroblastomas with a favourable prognosis (spontaneous
CC regression) from neuroblastomas with a poor prognosis (high malignancy).
CC The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in
XX an example of the invention
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1299 CCAGGAGTTCAGAC 1313
Db ||||| ||||| |||||
6 CCAGGAGTTCAGAC 20
RESULT 2346
ACD23029
ID ACD23029 standard; DNA; 20 BP.
XX AC ACD23029;
XX 25-AUG-2003 (first entry)
XX Human NEMO gene intron 7 donor sequence.
XX Human; ds; NF-kappaB essential modulator; nuclear factor kappa B;
KW incontinentia pigmenti; X-linked disorder; chromosome Xq28; NEMO;
KW immunomodulatory; dermatological; osteopathic; neuropathic;
KW apoptosis-related disease; immune-system related disease;
KW blood vessel-related disease; skin defect; dental defect; osteopetrosis;
KW ophthalmologic defect; neurological defect.
XX Homo sapiens.
XX US2003032055-A1.
XX 13-FEB-2003.
XX 22-MAY-2001; 2001US-00863049.
XX 22-MAY-2000; 2000US-0206223P.
XX (KENW/) KENWRICK S J.
PA (WOFF/) WOFFENDIN H.
PA (MUNN/) MUNNICH A.
PA (SMAH/) SMAHI A.
PA (ISRA/) ISRAEL A.
PA (POUS/) POUTKA A.
PA (HEIS/) HEISS N.
PA (DURS/) D'URSO M.
PA (LEWI/) LEWIS R A.
PA (NELS/) NELSON D L.
PA (ARAD/) ARADHYA S.
PA (LEVY/) LEVY M.
XX Kenrick SJ, Woffendin H, Munnich A, Smahi A, Israel A;
PI Poustka A, Heiss N, D'urso M, Lewis RA, Nelson DL, Aradhya S;
PI Levy M;
XX WPI; 2003-492063/46.
XX Detection of necrosis factor-kappa B related medical condition in
PT organism, by obtaining sample from the organism, and analyzing the sample
PT for alteration in specified amino acid sequences.
XX Claim 40; Page 19; 44pp; English.
PS

XX The invention relates to a nuclear factor-kappa B (NF-kappa B) related
 CC medical condition in an organism being detected by obtaining a sample
 CC from the organism, and analysing the sample for an alteration in a the
 CC nuclear factor kappaB essential modifier (NEMO) gene or protein sequence
 CC (neither shown in the specification). The alteration results in
 CC inactivation of NF-kappa B. Also included are treating or preventing NF-
 CC kappa B related medical condition in an organism by administering the
 CC NEMO protein to the organism and screening a test organism for a compound
 CC for the treatment of NF-kappa B related medical condition (by
 CC administering the compound to the organism, and assaying for an
 CC improvement in the NF-kappa B related medical condition). The method
 CC useful is for detecting NF-kappa B related condition, e.g. incontinentia
 CC pigmenti (IP), apoptosis-related disease, immune-system related disease,
 CC blood vessel-related disease, skin defect, dental defect, osteopetrosis,
 CC ophthalmologic defect, or neurological defect, in an organism, i.e. human
 CC including affected individual, carrier individual, or noncarrier
 CC individual. The NEMO gene is located on chromosome Xq28, incontinentia
 CC pigmenti being an X-linked disorder. Experiments in this study show
 CC variations in exon 2, 10, 9 and particularly intron 3 to be linked to
 CC familial incontinentia pigmenti. The present sequence is an intron donor
 CC or acceptor site from the human NEMO gene
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 70 CCCAGGGAGGGGCC 84
 ||||| ||||| |||||
 Db 6 CCAGGTGAGGGCCC 20

RESULT 2347
 ACC99704/C
 ID ACC99704 standard; DNA; 20 BP.
 XX
 AC ACC99704;
 XX
 DT 02-SEP-2003 (first entry)
 XX
 DE Cyclin D1 PCR primer SEQ ID NO:85.
 XX
 KW Multiplex real-time quantitative PCR; PCR primer; copy number;
 KW Alzheimer's disease; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003048377-A2.
 XX
 PD 12-JUN-2003.
 XX
 PF 02-DEC-2002; 2002WO-US038806.
 XX
 PR 30-NOV-2001; 2001US-0336095P.
 PR 19-JUL-2002; 2002US-0397475P.
 XX
 PA (UYRP) UNIV ROCHESTER.
 PA (THER/) THERIANOS S.
 XX
 PI Zhu M, Coleman P;
 XX
 DR WPI; 2003-532841/50.
 XX
 PT Determining the relative copy number of a group of target nucleic acid
 PT molecules present in a sample by performing a first or second PCR in a
 PT PCR mixture and quantifying the number of copies of the second target
 PT nucleic acid product.
 XX
 PS Disclosure; Fig 6; 118pp; English.
 XX
 CC The present invention describes a multiplex real-time quantitative PCR

CC method for determining the relative copy number of a group of target
 CC nucleic acid molecules present in a sample. The method comprises: (1)
 CC performing a first PCR in a PCR mixture; (2) performing a second PCR in a
 CC PCR mixture; and (3) quantifying the number of copies of the second
 CC target nucleic acid product present in the sample containing the target
 CC nucleic acid molecule. Also described: (1) quantifying the copy number of
 CC a group of target nucleic acids in a sample; and (2) determining whether
 CC a subject is at risk of acquiring Alzheimer's disease. The method is
 CC useful for determining the relative copy number of a group of target
 CC nucleic acid molecules present in a sample for determining whether a
 CC subject is at risk of acquiring Alzheimer's disease. ACC99620 to ACC99730
 CC represent PCR primer used in the exemplification of the present invention
 XX
 SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 275 CTGCTCCTGGGAAC 289
 ||||| ||||| |||||
 Db 20 CTGCTCCTGGTGAAC 6

RESULT 2348
 ADA27483/C
 ID ADA27483 standard; DNA; 20 BP.
 XX
 AC ADA27483;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Microorganism sequencing primer #83.
 XX
 KW microorganism detection; bi-directional DNA sequencing;
 KW HLA determination; human leukocyte antigen; reduced error risk;
 KW reduced contamination risk; sequencing; primer; ss.
 XX
 OS Human herpesvirus 4.
 XX
 PN US2003082535-Al.
 XX
 PD 01-MAY-2003.
 XX
 PF 07-MAR-2001; 2001US-00802110.
 XX
 PR 01-MAY-1996; 96US-00640672.
 PR 19-JUL-1996; 96US-00684498.
 PR 27-FEB-1997; 97US-00807138.
 PR 29-APR-1997; 97WO-US007134.
 PR 20-JAN-1998; 98US-00009483.
 PR 13-MAY-1999; 99US-00311260.
 XX
 PA (LEUS/) LEUSHNER J.
 PA (HUIM/) HUI M.
 PA (DUNN/) DUNN J M.
 PA (LACR/) LACROIX J.
 XX
 PI Leushner J, Hui M, Dunn JM, Lacroix J;
 XX
 DR WPI; 2003-576607/54.
 XX
 PT Microorganism detecting composition comprises dideoxynucleotide
 PT triphosphate(s) corresponding to one of four deoxynucleotide
 PT triphosphate, and thermally stable polymerase enzyme.
 XX
 PS Disclosure; Page 20; 94pp; English.

CC The invention relates to a microorganism detecting composition. The
 CC composition is used for detecting a target microorganism. It is used in a
 CC bi-directional DNA sequencing method in several contexts including
 CC detection of mutations, particularly mutations of medical significance,
 CC in samples derived from a human patient, animal, plant, or microorganism;

determination of HLA (human leukocyte antigen) type ancillary to transplant procedures, detection and identification of microorganisms, particularly pathogenic microorganisms, in a sample and in situ sequencing reactions to produce sequencing fragments within a histological specimen which are then removed from a selected location on the tissue preparation and loaded onto a gel for sequence analysis. The invention allows an evaluation to be directly performed on a natural abundance DNA sample. It provides for bi-directional sequencing of DNA which requires combining a complex DNA-containing sample with only a single reaction mixture, thus reducing risk of error and contamination, and increasing the ease with which the procedure can be automated. The present sequence represents a sequencing primer for identification of a microorganism.

XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1278 GTGGCCAGGCATCCT 1292
 |||||
 Db 16 GTGCCAGGCATCCT 2

RESULT 2349
 ACD13554
 ID ACD13554 standard; DNA; 20 BP.

AC ACD13554;

DT 14-AUG-2003 (first entry)

DE Human bi-directional promoter PCR/sequencing primer ON-DinB1-F3.

XX Human; ss; Goodpasture antigen binding protein; GPBP; COL4A3BP;
 KW collagen 4 alpha 3 binding protein; DNA polymerase kappa; Pol kappa;
 KW Goodpasture disease; cutaneous lupus; polk76; bi-directional promoter;
 KW autoimmune disease; cancer; antisense therapy; PCR; primer.

OS Homo sapiens.

XX US2003027165-A1.

XX 06-FEB-2003.

XX 07-DEC-2001; 2001US-00010920.

XX 08-DEC-2000; 2000US-0254649P.

XX (SAUS/) SAUS J.

PI Saus J;

XX WPI; 2003-479531/45.

XX New isolated DNA polymerase, pol kappa 76, useful in identifying autoimmune disorders and in treating cancer and autoimmune disorders by modifying its expression.

XX Example; Page 7; 54pp; English.

XX The invention relates to an isolated pol kappa (k) 76 polypeptide (an alternatively spliced form of DNA polymerase kappa), appearing as AB007327 (encoded by the cDNA appearing as ACD13492). The gene for POLKAPPA is located on chromosome 5q12-13 in a head-head arrangement with the gene encoding Goodpasture antigen binding protein (GPBP or collagen 4 alpha 3 binding protein (COL4A3BP), associated with autoimmune diseases such as Goodpasture's disease and cutaneous lupus) i.e. has a bi-directional promoter. Also included are a recombinant expression vector comprising the polk76 cDNA, a host cell transfected with the vector, detecting (MI) polk76 (comprising providing a protein sample to be screened, contacting the protein sample to be screened with an anti-

CC polk76 antibody and detecting the formation of an antibody- polypeptide complexes, where the presence of the antibody-polypeptide complexes indicates the presence of polk76), detecting (M2) the polk76 nucleic acid in a sample (comprising contacting the sample with one or more polk76 PCR primer, carrying out PCR to generate PCR products, and identifying the polk76-specific PCR), detecting an autoimmune condition in a patient (comprising providing a tissue or body fluid sample from the patient, providing a control tissue or body fluid sample in which no autoimmune condition is present, and detecting an increase in pol k76 RNA expression in the tissue of body fluid samples compared to the control sample, where the increase indicates the presence of an autoimmune condition) and treating (M3) a patient with an autoimmune disorder or cancer by modifying the expression or activity of pol k76 in the patient. Modifying the expression or activity of polk76 or polk76 nucleic acid, such as by increasing or decreasing their expression or activity using antibodies or antisense therapy, is useful for treating an autoimmune disorder or cancer. The present sequence is a PCR and/or sequencing primer used in the analysis of bi-directional promoters of other genes (and/or of polkappa/GPBP), whose structure and sequence were compared to the polkappa/GPBP bi-directional promoter

XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 537 CCCCATCTTTGACAA 551

Db 4 CCCCACTTTGACAA 18

RESULT 2350

ADA97855
 ID ADA97855 standard; DNA; 20 BP.

AC ADA97855;

XX 20-NOV-2003 (first entry)

XX Human tumour necrosis factor (TNF) inducible promoter PCR primer #57.

XX Human; tumour necrosis factor inducible promoter; TNF;
 KW autoimmune disorder; cancer; PCR; immunosuppressive; cytostatic; ss;
 KW primer.

XX Homo sapiens.

XX US2003082745-A1.

XX 01-MAY-2003.

XX 07-DEC-2001; 2001US-00008721.

XX 08-DEC-2000; 2000US-0254649P.

XX (SAUS/) SAUS J.

XX Saus J;

XX WPI; 2003-606062/57.

XX New tumor necrosis factor inducible promoters, useful for identifying promoters that are regulated by tumor necrosis factor, or for identifying candidate compounds for treating or preventing autoimmune disorders or cancer.

XX Example; Page 8; 57pp; English.

XX The invention relates to a tumour necrosis factor (TNF) inducible promoter. Also disclosed are an expression vector comprising one or more tumour necrosis factor inducible promoters and a recombinant host cell transfected with one or more expression vectors. The TNF inducible

CC promoters, expression vectors and host cells are useful for identifying
 CC promoters that are regulated by tumour necrosis factor or for identifying
 CC candidate compounds for treating or preventing autoimmune disorders or
 CC cancer. This sequence represents a PCR primer used for isolating a tumour
 CC necrosis factor inducible promoter of the invention.

XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 537 CCCCATCTTGACAA 551
 |||||
 Db 4 CCCCACTTGACAA 18

RESULT 2351
 ADB90005/C
 ID ADB90005 standard; DNA; 20 BP.

XX AC ADB90005;

DT 04-DEC-2003 (first entry)

XX Antisense oligonucleotide targeting mouse C3 component, ISIS140093.

KW Mouse; ss; antisense; complement component C3; inflammation;
 KW septic shock; multiple organ failure; hyperacute organ failure;
 KW autoimmune disorder; CNS inflammation; multiple sclerosis;
 KW atherosclerosis; tumour.

OS Mus musculus.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone and all cytosines are 5

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl nucleotides"

XX US2003096775-A1.

XX 22-MAY-2003.

XX 23-OCT-2001; 2001US-00001076.

XX 23-OCT-2001; 2001US-00001076.

XX (ISIS-) ISIS PHARM INC.

XX Graham MJ, Watt AT;

XX WPI; 2003-606441/57.

XX New antisense oligonucleotides targeted to a nucleic acid molecule
 FT encoding complement component C3, useful for treating a disease or
 PT condition associated with complement component C3, e.g. autoimmune
 PT disorder or infection.

XX Example 16; Page 27; 72pp; English.

XX The invention relates to a compound 8-50 nucleobases in length targeted
 CC to a nucleic acid molecule encoding complement component C3. The compound
 CC specifically hybridises with the nucleic acid molecule encoding

CC complement component C3 and inhibits the expression of complement
 CC component C3, or specifically hybridises with at least an 8-nucleobase
 CC portion of an active site on a nucleic acid molecule encoding complement
 CC component C3. Also included are a composition comprising the compound and
 CC a pharmaceutical carrier or diluent, inhibiting the expression of
 CC complement component C3 in cells or tissues (comprising contacting the
 CC cells or tissues with the compound cited above) and treating an animal
 CC having a disease or condition associated with complement component C3
 CC comprising administering to the animal the compound cited above so that
 CC expression of complement component C3 is inhibited. The antisense
 CC compounds are useful for inhibiting the expression of complement
 CC component C3 in cells or tissues, or for treating an animal having a
 CC disease or condition associated with complement component C3 such as an
 CC autoimmune disorder (e.g. multiple sclerosis), an infection, or
 CC atherosclerosis, inflammation, septic shock, multiple organ failure,
 CC hyperacute organ failure and CNS inflammation. The compounds are also
 CC useful as research reagents and diagnostics, in distinguishing functions
 CC of various members of a biological pathway, or for preventing or delaying
 CC infection, inflammation or tumour formation. The present sequence is an
 CC antisense oligonucleotide targeting mouse C3.

XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 338 AGCACTTGACATGG 352

|||||
 Db 20 AGGACTTGAACATGG 6

RESULT 2352

ADCT3020

ID ADCT3020 standard; DNA; 20 BP.

XX AC ADCT3020;

XX 01-JAN-2004 (first entry)

XX O-glycan alpha2,8-sialyltransferase-related oligo - SEQ ID 10.

XX O-glycan alpha2,8-sialyltransferase;

KW beta-galactoside alpha2,6-sialyltransferase; cytostatic; virucide;

KW antiinflammatory; neuroprotective; cancer metastasis; viral infection;

KW inflammation; nerve tissue; ss; PCR; primer.

XX Unidentified.

XX WO2003064655-A1.

XX 07-AUG-2003.

XX 30-JAN-2003; 2003WO-JP000883.

XX 30-JAN-2002; 2002JP-00021159.

XX 24-APR-2002; 2002JP-00122673.

XX (RIKE) RIKEN KK.

XX Takashima S, Tsujimoto M, Tsuji S;

XX WPI; 2003-627613/59.

XX Sugar-chain synthases which are sialyltransferases and encoded genes,
 PT applicable in drugs for inhibiting cancer metastasis, preventing viral
 PT infection, inhibiting inflammation and potentiating nerve tissues.

XX Example 1; SEQ ID NO 10; 97pp; Japanese.

XX The invention relates to a novel O-glycan alpha2,8-sialyltransferase
 CC having a novel substrate specificity and selectivity and a novel beta-
 CC galactoside alpha2,6-sialyltransferase having a novel substrate

CC specificity and selectivity. The enzymes of the invention demonstrate
CC cytostatic, virucide, antiinflammatory and neuroprotective activities and
CC may be applicable in drugs for inhibiting cancer metastasis, preventing
CC viral infection, inhibiting inflammation and potentiating nerve tissues.
CC The current sequence is that of the sugar chain synthase-related
CC oligonucleotide of the invention.

XX
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1402 TTGCAGTTTGAGGGT 1416
|||||
Db 3 TTGCAGTTTGAGGAT 17

RESULT 2353
ADG31625
ID ADG31625 standard; DNA; 20 BP.
XX
AC ADG31625;
XX
DT 26-FEB-2004 (first entry)
XX
DE PCR primer used to amplify human PKHD1 exon 46 for mutation analysis.
XX

KW PCR; ss; polycystic kidney and hepatic disease 1; PKHD1;
KW autosomal recessive polycystic kidney disease; ARPKD;
KW congenital hepatic fibrosis; human; nephrotropic; cell proliferation;
KW cellular adhesion; repulsion; primer.

XX
OS Homo sapiens.
XX
PN WO2003085088-A2.
XX
PD 16-OCT-2003.

XX 03-FEB-2003; 2003WO-US003410.

XX 01-FEB-2002; 2002US-0353472P.

XX (UABR-) UAB RES FOUND.

XX Germino GG, Omuchic LF, Nagasawa Y, Guay-Woodford LM, Somolo S;
XX Furu W;

XX WPI; 2003-877030/81.

XX New polycystic kidney and hepatic disease 1 polynucleotides and
XX polypeptides, useful in diagnostic testing and for developing targeted
XX therapeutic interventions for patients with autosomal recessive
XX polycystic kidney disease.

XX Disclosure; Page 40; 41pp; English.

XX This invention relates to a novel nucleic acid that encodes the
XX polycystic kidney and hepatic disease 1 (PKHD1) polypeptide. It has been
XX identified that a mutation in the PKHD1 gene is associated with autosomal
XX recessive polycystic kidney disease (ARPKD), which is characterised by
XX enlarged kidneys and congenital hepatic fibrosis, and is most commonly
XX observed in children and infants. The present invention describes the
XX identification of the PKHD1 gene, mapped to human chromosome 6p21.1-p12,
XX and splice variants thereof. The PKHD1 polynucleotides and polypeptides
XX are useful in diagnostic testing and for developing targeted therapeutic
XX interventions for patients with ARPKD. Furthermore, they exhibit
XX nephrotropic activity and are involved in the regulation of cell
XX proliferation, cellular adhesion and repulsion. This oligonucleotide
XX sequence is a PCR primer used to amplify human PKHD1 exons for mutation
XX analysis, in an exemplification of the invention.

XX Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1051 GCCAAGTCAATCCCA 1065
|||||
Db 2 GGCAAGTCAATCCCA 16

RESULT 2354
ADF88295/c
ID ADF88295 standard; DNA; 20 BP.

XX
AC ADF88295;

XX
DT 26-FEB-2004 (first entry)

XX Single nucleotide polymorphism detection primer, SEQ ID No 1878.

XX human; single nucleotide polymorphism; microarray; side effect; ss;
KW primer; PCR.

XX
OS Synthetic.
OS Homo sapiens.

XX
PN JP2003235571-A.

XX
PD 26-AUG-2003.

XX
PF 12-FEB-2002; 2002JP-00034717.

XX
PR 12-FEB-2002; 2002JP-00034717.

XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX
DR WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
XX in human gene.

XX Claim 2; SEQ ID NO 1878; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified
XX from a human gene having any one of 935 fully defined sequences as given
XX in specification, or a sequence having a base substitution. The invention
XX further relates to: an oligonucleotide containing single nucleotide
XX polymorphisms; a PCR primer set chosen from the combination of two DNA
XX fragments from any one of 1220 fully defined sequences as given in
XX specification; a labelling probe containing the SNP containing oligo; and
XX a microarray equipped with the SNP containing oligo. The isolated human
XX gene of the invention is useful for detecting the single nucleotide
XX polymorphisms in human gene. The isolated human gene is also useful for
XX diagnosis of disease and determination of side effect to a medical agent.
XX The isolated human gene is also effective in detecting single nucleotide
XX polymorphisms in a human gene. This polynucleotide sequence represents
XX one of the PCR primers used in the single nucleotide polymorphism
XX detection method of the invention.

XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 123 CATGGATCGGATGAA 137
|||||
Db 19 CATGGACGGGATGAA 5

RESULT 2355
ADG93083
ID ADG93083 standard; DNA; 20 BP.

XX ADG93083;
AC 11-MAR-2004 (first entry)
XX
XX Human SHH specific antisense oligonucleotide, ISIS 104356.
DE
XX Sonic hedgehog; SHH; cancer; autoimmune disease; inflammatory disorder;
KW antisense gene therapy; human; antisense; phosphorothioate backbone; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone where all cytidine
FT residues are 5-methyl cytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl reidues"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl reidues"
XX
XX US2003105041-A1.
XX
XX 05-JUN-2003.
XX
XX 16-NOV-2001; 2001US-00001844.
XX
XX 16-NOV-2001; 2001US-00001844.
XX
XX (BENNI/) BENNETT C F.
PA (COWS/) COWSERT L M.
XX
XX Bennett CF, Cowsert LM;
PI WPI; 2003-897023/82.
XX
XX New compound for inhibiting Sonic hedgehog (SHH) expression in cells or
PT tissues and for treating an animal having a disease or condition
PT associated with SHH, such as cancer, an autoimmune disease, or an
PT inflammatory disorder.
XX
XX Example 15; SEQ ID NO 37; 36pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of Sonic hedgehog (SHH). The composition
CC comprises antisense compounds targetted to SHH. The antisense compound is
CC used to inhibit the expression of SHH in cells or tissues and to treat an
CC animal having a disease or condition associated with SHH, such as cancer,
CC an autoimmune disease or an inflammatory disorder. It is also useful in
CC differential and/or combinatorial analyses to elucidate expression
CC patterns of a portion or the entire complement of genes expressed within
CC cells and tissues. The antisense compounds are useful in antisense gene
CC therapy. The present sequence is an antisense oligonucleotide targetted
CC to human SHH DNA. This sequence is used to illustrate the method of the
CC invention.
XX
XX Sequence 20 BP; 0 A; 9 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1211 CGGCTCCAGGTGG 1225
Db 5 CGGCTCCAGGTGG 19

RESULT 2356
ADH94427/c
ID ADH94427 standard; DNA; 20 BP.
XX
XX AC ADH94427;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Human gene PCR primer #1272.
XX
XX human; gene sequence; single nucleotide polymorphism; SNP;
KW disease diagnosis; ss; PCR; primer.
XX
XX Homo sapiens.
XX
XX PN JP2003174883-A.
XX
XX PD 24-JUN-2003.
XX
XX PF 11-DEC-2001; 2001JP-00377637.
XX
XX PR 11-DEC-2001; 2001JP-00377637.
XX
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX DR WPI; 2003-819215/77.
XX
XX Polynucleotide for detecting single nucleotide polymorphisms existing in
PT human gene, contains isolated human gene having specified sequence.
XX
XX PS Claim 2; SEQ ID NO 2264; 529pp; Japanese.
XX
XX CC The invention comprises isolated human gene sequences and PCR primer
CC sequences which can be used to detect single nucleotide polymorphisms
CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs
CC existing in human genes and for the diagnosis of human disease. The
CC present DNA sequence represents a human gene PCR primer of the invention.
XX
XX SQ Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 52 GCAGTGTGACTGCTG 66
Db 20 GCAGTGTGCTGCTG 6
RESULT 2357
ABZ92732/c
ID ABZ92732 standard; DNA; 20 BP.
XX
XX AC ABZ92732;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX

PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 7974; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1299 CGAGGAGTTCAGAC 1313
 Db | | | | | | | | | | | | | | | |
 16 CCAGGAGTTCAGAC 2
 RESULT 2358
 ABZ87042
 ID ABZ87042 standard; DNA; 20 BP.
 XX
 AC ABZ87042;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 FN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX

PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 2284; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1473 GGAGCGGATCCACAA 1487
 Db | | | | | | | | | | | | | | | |
 3 GGAGCGGAACCCACAA 17
 RESULT 2359
 ABZ86781/c
 ID ABZ86781 standard; DNA; 20 BP.
 XX
 AC ABZ86781;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 FN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX

PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
XX (EPITG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 2023; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 515 TGGAGAAGCTGATCC 529
Db 19 TGGAGAAGCTGATCC 5

RESULT 2360
ABZ90932
ID ABZ90932 standard; DNA; 20 BP.
XX
XX AC ABZ90932;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX

PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
XX (EPITG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 6174; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1480 ATCCACAAACTTCCT 1494
Db 3 ATCCACAAACTTCCT 17

RESULT 2361
ABZ92011
ID ABZ92011 standard; DNA; 20 BP.
XX
XX AC ABZ92011;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX

PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandraaagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 XX ubiquinone.
 PS Disclosure; SEQ ID NO 7253; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, for reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 1 A; 3 C; 11 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 236 GTGGTGGCGGCGAGT 250
 DB 5 GTGGTGGCGGCGAGC 19
 |||||
 RESULT 2362
 ABZ75745
 ID ABZ75745 standard; DNA; 20 BP.
 AC
 XX ABZ75745;
 XX
 XX 15-MAY-2003 (first entry)
 DT
 DE Sorting nexin 3 gene specific forward primer AF034546-83P.
 XX
 XX Gene expression; nucleic acid detection; drug development; forensic;
 KW sorting nexin 3; PCR; primer; ss.
 XX
 XX Synthetic.
 OS
 XX WO2003008542-A2.
 PN
 XX 30-JAN-2003.
 PD
 XX 12-JUL-2002; 2002WO-US021821.
 PF
 XX 16-JUL-2001; 2001US-0305154P.
 PR
 XX

PA (GENE-) GENE LOGIC INC.
 XX
 PI Scherf U;
 XX
 DR WPI; 2003-229568/22.
 XX
 PT Identifying at least one gene expressed across different cell or tissue
 PT types by monitoring control genes, useful in medical and biotechnological
 PT research and development, diagnostic testing, drug development and
 PT forensics.
 XX
 PS Disclosure; Page 41; 48pp; English.
 XX
 CC The invention relates to identifying at least one gene that is
 CC consistently expressed across different cell or tissue types in an
 CC organism. The method involves preparing gene expression profiles for
 CC different cell or tissue types, calculating a variation coefficient for
 CC at least one gene in each of the profiles across different cell or tissue
 CC types, and selecting any gene whose coefficient indicates that the gene
 CC is consistently expressed across the cell or tissue types. The methods
 CC and compositions of the present invention of quantitative nucleic acid
 CC detection assays, are useful in medical and biotechnological research and
 CC development, diagnostic testing, drug development and forensics. The
 CC present sequence represents a PCR primer specific for the sorting nexin 3
 CC gene, used in the course of the invention
 XX
 SQ Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 985 AAGCCCCAGAACCTG 999
 DB 1 AAGCCGCGAACCTG 15
 |||||
 RESULT 2363
 ADA26843/C
 ID ADA26843 standard; DNA; 20 BP.
 XX
 AC ADA26843;
 XX
 XX 20-NOV-2003 (first entry)
 DT
 DE Human nuclear receptor subfamily 4 reverse PCR primer #127.
 XX
 KW Metastasis; neoplastic growth; detection; prediction;
 KW neoplastic growth marker; drug screening; cancer; tumour;
 KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;
 KW drug targeting; human; cytostatic; reverse transcription-PCR; RT-PCR;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003031930-A2.
 PN
 XX 17-APR-2003.
 PD
 XX 02-OCT-2002; 2002WO-US031247.
 PF
 XX 09-OCT-2001; 2001US-0327332P.
 PR
 XX (UYJO) UNIV JOHNS HOPKINS.
 PA
 XX Vogelstein B, Kinzler KW, Saha S, Bardelli A;
 PI WPI; 2003-393457/37.
 DR
 XX Identifying regions of neoplastic growth in a human body, useful for
 PT detecting or predicting metastasis, comprises administering to the human
 PT body an antibody or peptide that specifically binds to a protein marker
 PT of neoplastic growth.


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XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013143.
XX PR 24-APR-2001; 2001US-0286036P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX PT Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX PS Claim 15; SEQ ID NO 2023; 763pp; English.
XX CC This invention describes a novel composition (a) a first active agent,
XX CC comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX CC inflammation, allergies and/or surfactant hypoproduction are associated
XX CC with a disease or condition such as pulmonary vasoconstriction,
XX CC inflammation, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, emphysema, chronic obstructive pulmonary disease, pulmonary
XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX CC The reduced adenosine content of the anti-sense oligos corresponding to
XX CC thymidines present in the target RNA serves to prevent the breakdown of
XX CC the oligonucleotides into products that free adenosine into the system
XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX CC prevent any unwanted effects due to it
XX SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 515 TGGAGAGCTGACCC 529
Db 19 TGGAGAGCTGATCC 5

RESULT 2366
ABD28241
ID ABD28241 standard; DNA; 20 BP.
XX AC ABD28241;
XX DT 29-JUL-2004 (first entry)
XX DE R19956-derived oligonucleotide SEQ ID 7253.
XX

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KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KW pulmonary transplantation rejection; ss; primer.
OS Homo sapiens.
XX WO200285309-A2.
XX PN 31-OCT-2002.
XX PD 23-APR-2002; 2002WO-US013143.
XX PF 24-APR-2001; 2001US-0286036P.
XX PR (EPIG-) EPIGENESIS PHARM INC.
XX PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX PI WPI; 2003-093058/08.
XX DR Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX PS Claim 15; SEQ ID NO 7253; 763pp; English.
XX CC This invention describes a novel composition (a) a first active agent,
XX CC comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX CC inflammation, allergies and/or surfactant hypoproduction are associated
XX CC with a disease or condition such as pulmonary vasoconstriction,
XX CC inflammation, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX CC The reduced adenosine content of the anti-sense oligos corresponding to
XX CC thymidines present in the target RNA serves to prevent the breakdown of
XX CC the oligonucleotides into products that free adenosine into the system
XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX CC prevent any unwanted effects due to it
XX SQ Sequence 20 BP; 1 A; 3 C; 11 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 236 GTGGTGGCGCAGTG 250
Db 5 GTGGTGGCGCAGCG 19

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RESULT 2367
ABD23272
ID ABD23272 standard; DNA; 20 BP.
AC ABD23272;
XX
XX
DT 29-JUL-2004 (first entry)
XX
XX Human myosin X-derived oligonucleotide SEQ ID 2284.
DE
DE
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 2284; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has antiallergic, antiinflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
CC
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1473 GGAGCGGATCCACAA 1497
XX ||||| |||||
XX 3 GGAGCGGACCAACAA 17
XX
XX RESULT 2368
XX ABD27162
XX ID ABD27162 standard; DNA; 20 BP.
XX
XX AC ABD27162;
XX
XX 29-JUL-2004 (first entry)
XX
XX AA486518-derived oligonucleotide SEQ ID 6174.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 6174; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has antiallergic, antiinflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
CC
```

or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1480 ATCCAGAACTTCCT 1494
Db 3 ATCCAGAACTTCCT 17
||||| |||||||

RESULT 2369
ABD28962/c
ID ABD28962 standard; DNA; 20 BP.
AC ABD28962;
XX
XX
DT 29-JUL-2004 (first entry)
XX
XX
DE N58473-derived oligonucleotide SEQ ID 7974.
XX
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
XX WO200285309-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013143.
PF
XX
XX 24-APR-2001; 2001US-0286036P.
PR
XX
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandraagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
DR
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 7974; 763pp; English.
PS
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC

surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, cancer, transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CCAGGAGTTCAAGAC 1313
Db 16 CCAGGAGTTCAAGAC 2
||||| |||||||

RESULT 2370
ADH54805
ID ADH54805 standard; DNA; 20 BP.
XX
AC ADH54805;
XX
XX 25-MAR-2004 (first entry)
DT
XX
XX Human VEGF-C target region ISIS 114956.
DE
XX
XX human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;
KW diabetic retinopathy; autoimmune disorder; inflammatory disorder;
KW vascular endothelial growth factor.
XX
XX Homo sapiens.
OS
XX
XX US2003232437-A1.
PN
XX
XX 18-DEC-2003.
PD
XX
XX 17-JUN-2002; 2002US-00173718.
PF
XX
XX 17-JUN-2002; 2002US-00173718.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Zhang H, Dobie KW;
PI
XX
XX WPI; 2004-061284/06.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
PT useful for treating atherosclerosis, diabetic retinopathy, or
PT inflammatory disorders.
XX

PS Example 15; SEQ ID NO 106; 83pp; English.

XX The invention relates to a compound targeted to and which specifically

CC hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the

CC expression of VEGF-C. The compound, composition and methods are useful

CC for treating a disease or condition associated with VEGF-C, such as a

CC cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or

CC an autoimmune or inflammatory disorder. They are also useful in research

CC and diagnostics for modulating the expression of VEGF-C. The present

CC sequence represents a human VEGF-C target region.

XX Sequence 20 BP; 2 A; 8 C; 9 G; 1 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCCGGCGC 90

DB 4 GGAGGGCCCCGGCGC 18

RESULT 2371

ADH54751/c

ID ADH54751 standard; DNA; 20 BP.

XX

AC ADH54751;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human VEGF-C antisense oligonucleotide ISIS 196824.

XX

KW human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;

KW diabetic retinopathy; autoimmune disorder; inflammatory disorder;

KW vascular endothelial growth factor; antisense.

XX

XX Synthetic.

OS Homo sapiens.

XX

XX US2003232437-A1.

XX

PD 18-DEC-2003.

XX

XX 17-JUN-2002; 2002US-00173718.

XX

XX 17-JUN-2002; 2002US-00173718.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Zhang H, Dobie KW;

XX

XX WPI; 2004-061284/06.

XX

XX New compounds, particularly antisense oligonucleotides targeted to a

XX nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),

XX useful for treating atherosclerosis, diabetic retinopathy, or

XX inflammatory disorders.

XX

XX Example 15; SEQ ID NO 52; 83pp; English.

XX

XX The invention relates to a compound targeted to and which specifically

XX hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the

XX expression of VEGF-C. The compound, composition and methods are useful

XX for treating a disease or condition associated with VEGF-C, such as a

XX cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or

XX an autoimmune or inflammatory disorder. They are also useful in research

XX and diagnostics for modulating the expression of VEGF-C. The present

XX sequence represents a human VEGF-C antisense oligonucleotide.

XX Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCCGGCGC 90

DB 4 GGAGGGCCCCGGCGC 18

RESULT 2371

ADH54751/c

ID ADH54751 standard; DNA; 20 BP.

XX

AC ADH54751;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human beta-site APP-cleaving enzyme 2 DNA target sequence #8.

XX

KW Antisense therapy; human; beta-site APP-cleaving enzyme 2;

KW hyperproliferative disorder; cancer; neurodegenerative disorder;

KW Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.

XX

XX Homo sapiens.

OS

XX US2003224517-A1.

XX

XX 04-DEC-2003.

XX

XX 04-JUN-2002; 2002US-00163272.

XX

XX 04-JUN-2002; 2002US-00163272.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Dobie KW;

XX

XX WPI; 2004-022081/02.

XX

XX New compounds, particularly antisense oligonucleotides targeted to a

XX nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating

XX a disease or condition, e.g. cancer, Alzheimer's disease or

XX neurodegenerative disease.

XX

XX Example 15; SEQ ID NO 96; 59pp; English.

XX

XX The present invention relates to antisense compounds targeted to a

XX nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense

XX compound comprises an antisense oligonucleotide that specifically

XX hybridises with the nucleic acid and inhibits the expression of beta-site

XX APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric

XX oligonucleotide. The antisense oligonucleotide comprises at least one

XX modified internucleoside linkage, preferably a phosphorothioate linkage.

XX It also comprises at least one modified sugar moiety, preferably a 2'-O-

XX methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further

XX comprises at least one modified nucleobase, preferably a 5-

XX methylcytosine. The antisense oligonucleotides are useful for the

XX treatment of diseases such as hyperproliferative disorders, e.g. cancer,

XX and neurodegenerative disorders such as Alzheimer's disease. The present

XX sequence represents a human beta-site APP-cleaving enzyme 2 DNA target

XX sequence for an antisense oligonucleotide.

XX

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524

DB 6 CTACCTGGAGATGCT 20

RESULT 2373

ADH45075/c

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGGCCCCGGCGC 90

DB 17 GGAGGGCCCCGGCGC 3

RESULT 2372

ADH45152

ID ADH45152 standard; DNA; 20 BP.

XX

XX ADH45152;

XX

XX 25-MAR-2004 (first entry)

XX

XX Human beta-site APP-cleaving enzyme 2 DNA target sequence #8.

XX

KW Antisense therapy; human; beta-site APP-cleaving enzyme 2;

KW hyperproliferative disorder; cancer; neurodegenerative disorder;

KW Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.

XX

XX Homo sapiens.

OS

XX US2003224517-A1.

XX

XX 04-DEC-2003.

XX

XX 04-JUN-2002; 2002US-00163272.

XX

XX 04-JUN-2002; 2002US-00163272.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Dobie KW;

XX

XX WPI; 2004-022081/02.

XX

XX New compounds, particularly antisense oligonucleotides targeted to a

XX nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating

XX a disease or condition, e.g. cancer, Alzheimer's disease or

XX neurodegenerative disease.

XX

XX Example 15; SEQ ID NO 96; 59pp; English.

XX

XX The present invention relates to antisense compounds targeted to a

XX nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense

XX compound comprises an antisense oligonucleotide that specifically

XX hybridises with the nucleic acid and inhibits the expression of beta-site

XX APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric

XX oligonucleotide. The antisense oligonucleotide comprises at least one

XX modified internucleoside linkage, preferably a phosphorothioate linkage.

XX It also comprises at least one modified sugar moiety, preferably a 2'-O-

XX methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further

XX comprises at least one modified nucleobase, preferably a 5-

XX methylcytosine. The antisense oligonucleotides are useful for the

XX treatment of diseases such as hyperproliferative disorders, e.g. cancer,

XX and neurodegenerative disorders such as Alzheimer's disease. The present

XX sequence represents a human beta-site APP-cleaving enzyme 2 DNA target

XX sequence for an antisense oligonucleotide.

XX

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 13.4; DB 1; Length 20;

Best Local Similarity 93.3%; Pred. No. 1.2e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524

DB 6 CTACCTGGAGATGCT 20

RESULT 2373

ADH45075/c

```
ID ADH45075 standard; DNA; 20 BP.
XX
AC ADH45075;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human beta-site APP-cleaving enzyme 2, antisense oligonucleotide #9.
XX
XX Antisense therapy; human; beta-site APP-cleaving enzyme 2;
KW hyperproliferative disorder; cancer; neurodegenerative disorder;
KW Alzheimer's disease; cytostatic; neuroprotective; nootropic;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003224517-A1.
XX
XX 04-DEC-2003.
XX
XX 04-JUN-2002; 2002US-00163272.
XX
XX 04-JUN-2002; 2002US-00163272.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-022081/02.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating
XX a disease or condition, e.g. cancer, Alzheimer's disease or
XX neurodegenerative disease.
XX
XX Example 15; SEQ ID NO 19; 59pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridizes with the nucleic acid and inhibits the expression of beta-site
XX APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric
XX oligonucleotide. The antisense oligonucleotide comprises at least one
XX modified internucleoside linkage, preferably a phosphorothioate linkage.
XX It also comprises at least one modified sugar moiety, preferably a 2'-O-
XX methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
XX comprises at least one modified nucleobase, preferably a 5-
XX methylcytosine. The antisense oligonucleotides are useful for the
XX treatment of diseases such as hyperproliferative disorders, e.g. cancer,
XX and neurodegenerative disorders such as Alzheimer's disease. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 510 CTACTGGAGAGCT 524
XX |||||
XX 15 CTACTGGAGATGCT 1
XX
XX RESULT 2374
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 510 CTACTGGAGAGCT 524
XX |||||
XX 15 CTACTGGAGATGCT 1
XX
XX RESULT 2374
```

```
ADI28277
ID ADI28277 standard; cDNA; 20 BP.
XX
AC ADI28277;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PRL3 antisense target region #21.
XX
XX Human; antisense gene therapy; ss; PRL3;
KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;
KW diabetes; glucose tolerance; insulin resistance; obesity;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
XX US2003235911-A1.
XX
XX 25-DEC-2003.
XX
XX 20-JUN-2002; 2002US-00177554.
XX
XX 20-JUN-2002; 2002US-00177554.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW, Zhang H;
XX
XX WPI; 2004-070585/07.
XX
XX New antisense oligonucleotide, comprising a sequence targeted to a
XX nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL
XX -3), useful for preparing a composition for treating hyperproliferative
XX disorders, e.g., cancer.
XX
XX Example 16; SEQ ID NO 184; 77pp; English.
XX
XX The invention relates to a compound comprising a sequence comprising 8-80
XX base pairs (bp) targeted to a nucleic acid encoding protein tyrosine
XX phosphatase type IVA member 3 (PRL-3), that specifically hybridizes with
XX the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is
XX an antisense oligonucleotide (AO). Also included are a composition
XX comprising the compound and a carrier or diluent, inhibiting the
XX expression of PRL-3 in cells or tissues, treating an animal having or
XX suspected of having a disease or condition associated with PRL-3 and
XX screening for an antisense compound. The antisense oligonucleotide is
XX useful for preparing a composition for treating hyperproliferative
XX disorder, particularly cancer (e.g. colorectal cancer), diabetes,
XX reduced glucose tolerance, insulin resistance and obesity. The present
XX sequence is a Human PRL3 cDNA AO target region.
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.4; DB 1; Length 20;
XX Best Local Similarity 93.3%; Pred. No. 1.2e+03;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 123 CATGGATCGGATGAA 137
XX |||||
XX 1 CATGGCTCGGATGAA 15
XX
XX RESULT 2375
XX
XX ADI28141/C
ID ADI28141 standard; DNA; 20 BP.
XX
AC ADI28141;
XX
DT 22-APR-2004 (first entry)
XX
DE Antisense oligonucleotide targeting human PRL3 ISIS 217468.
XX
XX Human; antisense gene therapy; ss; PRL3;
```

KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;
KW diabetes; glucose tolerance; insulin resistance; obesity;
XX hyperproliferative disorder; cytostatic.

XX Homo sapiens.

OS
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= b
FT /*mod_base= OTHER
FT /*note= "Phosphorothioate backbone and all cytidines are 5
FT -methyl cytidines"
FT modified_base 1..5
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "2'-methoxyethyl residues"
FT modified_base 16..20 /*tag= c
FT /*mod_base= OTHER
FT /*note= "2'-methoxyethyl residues"
XX US2003235911-A1.
PN
XX
XX
PD XX
XX
XX 25-DEC-2003.
XX
XX 20-JUN-2002; 2002US-00177554.
XX
XX 20-JUN-2002; 2002US-00177554.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX
XX
PI Dobie KW, Zhang H;
XX
XX WPI; 2004-070585/07.
DR
XX
XX
XX New antisense oligonucleotide, comprising a sequence targeted to a
PT nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL
PT -3), useful for preparing a composition for treating hyperproliferative
PT disorders, e.g., cancer.
XX
XX Example 15; SEQ ID NO 48; 77pp; English.
PS
XX The invention relates to a compound comprising a sequence comprising 8-80
CC base pairs (bp) targeted to a nucleic acid encoding protein tyrosine
CC phosphatase type IVA member 3 (PRL-3), that specifically hybridises with
CC the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is
CC an antisense oligonucleotide (AO). Also included are a composition
CC comprising the compound and a carrier or diluent, inhibiting the
CC expression of PRL-3 in cells or tissues, treating an animal having or
CC suspected of having a disease or condition associated with PRL-3 and
CC screening for an antisense compound. The antisense oligonucleotide is
CC useful for preparing a composition for treating hyperproliferative
CC disorder, particularly cancer (e.g. colorectal cancer), diabetes,
CC reduced glucose tolerance, insulin resistance and obesity. The present
CC sequence is an antisense oligonucleotide targeting human PRL3.
XX
XX Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 123 CATGGATCGGATCAA 137
Db 20 CATGGCTCGGATGAA 6

RESULT 2376
ADJ85574
ID ADJ85574 standard; DNA; 20 BP.
XX
XX ADJ85574;
AC
XX

DT 06-MAY-2004 (first entry)
XX
XX Nucleic acid analysis-related Tag probe SeqID642.
DE
XX restriction endonuclease site; T3 promoter site; Tag gene; Poly A site;
KW T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;
KW assay development; product development; product validation;
KW quality control; probe; ss.
XX
XX Synthetic.
OS Unidentified.
XX WO2004007684-A2.
PN
XX 22-JAN-2004.
PD
XX 14-JUL-2003; 2003WO-US021990.
PF
XX 12-JUL-2002; 2002US-0395530P.
PR
XX (AFY-) AFFYMETRIX INC.
PA
XX Christians FC;
XX
XX WPI; 2004-122923/12.
DR
XX New DNA molecules made by annealing and extending overlapping 60mer
PT oligonucleotides, useful in producing synthetic Tag genes useful as assay
PT controls, in assay development, product development and for quality
PT control.
XX
XX Disclosure; SEQ ID NO 642; 91pp; English.
PS
XX This invention relates to a novel DNA molecule which comprises a DNA
CC molecule made up of the following elements in a 5' to 3' direction: a
CC first restriction endonuclease site; a T3 promoter site; at least one Tag
CC gene comprising at least 5 20mer Tag sequences; a Poly A site having at
CC least 21 consecutive A residues; a second restriction endonuclease site
CC which may be the same or different than the first restriction
CC endonuclease site; or a T7 Promoter on the opposite strand as the T3
CC promoter. The invention may be useful in nucleic acid analysis, in
CC particular to synthetic Tag genes useful as assay controls, in assay
CC development, product development and validation and for quality control.
CC The present sequence is that of a Tag oligonucleotide probe which may be
CC used during the creation of the novel DNA molecule of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1264 CCAACTGAGGAGACG 1278
Db 2 CCTACTGAGGAGACG 16

RESULT 2377
ADJ86243
ID ADJ86243 standard; DNA; 20 BP.
XX
XX ADJ86243;
AC
XX 06-MAY-2004 (first entry)
DT
XX Nucleic acid analysis-related Tag probe SeqID1311.
DE
XX restriction endonuclease site; T3 promoter site; Tag gene; Poly A site;
KW T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;
KW assay development; product development; product validation;
KW quality control; probe; ss.
XX
XX Synthetic.

CC demonstrates cytostatic activities and may be useful for treating a
 CC disease or condition associated with PTPRA, such as a hyperproliferative
 CC disorder or metabolic disorder, as well as in research and diagnostics
 CC for modulating the expression of PTPRA. The current sequence is that of
 CC an antisense 2'-MOE (2'-methoxyethyl) gapmer oligonucleotide which was
 CC targeted to human PTPRA of the invention.

XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 866 AGCAGTACTGGATG 880
 |||||
 DB 1 AGCAGCACCTGGATG 15

RESULT 2380
 ADK12304/c
 ID ADK12304 standard; DNA; 20 BP.

XX AC ADK12304;

XX DT 20-MAY-2004 (first entry)

XX DE Mouse complement component C3 DNA, antisense oligonucleotide #50.

XX KW Antisense therapy; mouse; complement component C3; autoimmune disorder;
 KW multiple sclerosis; infection; atherosclerosis; neuroprotective;
 KW antiarteriosclerotic; antimicrobial; antiinflammatory; cytostatic;
 KW phosphorothioate; ss.

XX OS Mus musculus.

XX FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER

FT /note= "This oligonucleotide has a phosphorothioate
 FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 FT and 3' ends, which are 5 nucleotides in length at each
 FT end. All cytidine residues are 5-methylcytidines"

XX PN US2004043956-A1.

XX PD 04-MAR-2004.

XX PF 18-AUG-2003; 2003US-00642802.

XX PR 23-OCT-2001; 2001US-00001076.

XX (GRAH/) GRAHAM M J.
 PA (WATT/) WATT A T.

XX PI Graham MJ, Watt AT;

XX XX WPI; 2004-225730/21.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT complement component C3, useful for treating multiple sclerosis, an
 PT infection or atherosclerosis.

PS Example 16; SEQ ID NO 162; 74pp; English.

XX The present invention relates to antisense compounds targeted to a
 CC nucleic acids encoding human and mouse complement component C3. The
 CC antisense compound comprises an antisense oligonucleotide that
 CC specifically hybridises with the nucleic acid and inhibits the expression
 CC of complement component C3 in cells. The antisense oligonucleotide is a
 CC chimeric oligonucleotide. The antisense oligonucleotide comprises at
 CC least one modified internucleoside linkage, preferably a phosphorothioate
 CC linkage. It also comprises at least one modified sugar moiety, preferably

CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
 CC further comprises at least one modified nucleobase, preferably a 5-
 CC methylcytosine. The antisense oligonucleotides are useful for the
 CC treatment of diseases such as autoimmune disorders e.g. multiple
 CC sclerosis, infections, and atherosclerosis. The present sequence
 CC represents an antisense oligonucleotide used in the examples of the
 CC present invention.

XX SQ Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 338 AGGACTTGAAGATGG 352
 |||||
 DB 20 AGGACTTGAACATGG 6

RESULT 2381

ADL23570

ID ADL23570 standard; DNA; 20 BP.

XX AC ADL23570;

XX DT 20-MAY-2004 (first entry)

XX DE Detector oligonucleotide used in DNA sequencing.

XX KW DNA sequencing; generic gene chip; diagnosis; genomic analysis;
 KW gene expression analysis; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Fluorophore labelled residue"

XX PN US6692915-B1.

XX PD 17-FEB-2004.

XX PF 20-JUL-2000; 2000US-00619812.

XX PR 22-JUL-1999; 99US-0145043P.

XX (NALL/) NALLUR G N.

XX PI Nallur GN;

XX XX WPI; 2004-236461/22.

XX Identifying and quantifying a nucleic acid in a sample, by providing
 PT subsequence sets present in the sample, useful e.g. for analyzing
 PT differential nucleic acid expression.

PS Example 9; SEQ ID NO 11; 30pp; English.

XX The invention relates to methods and devices for sequencing a
 CC polynucleotide by determining subsets of composite subsequences present
 CC in nucleic acid subspaces generated from the sample polynucleotide. A
 CC hairpin primer interrogates the composite subspaces in a two-step
 CC process resulting first in a polymerase extended product whose synthesis
 CC identifies the first subsequence of the composite subsequence. The second
 CC subsequence is identified by hybridising the polymerase extended
 CC products or amplified products therefrom to an array of capture probes
 CC wherein each capture probe is positionally distinguishable from other
 CC capture probes. The method is useful for sequencing a polynucleotide on a
 CC generic gene chip. The invention is useful for identification and
 CC quantitative determination of the presence of nucleic acids in a sample,
 CC in particular to methods of genomic analysis, for identifying differences

CC in the relative abundance of nucleic acids in a mixture of nucleic acids,
 CC and generally to diagnostic aids for analysing nucleic acid composition
 CC and content of biological samples, e.g. medical and agricultural. The
 CC method can be applied to gene expression analysis by identifying and
 CC quantifying cDNA. The method is rapid and cost effective. The present
 CC sequence is a detector oligonucleotide used in an exemplification of the
 CC invention.

SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1299 CGAGGAGTTCAAGAC 1313
 Db 5 CCAGGAGTTCAAGAC 19
 |||||

RESULT 2382
 ADL00940/c
 ID ADL00940 standard; DNA; 20 BP.

XX AC ADL00940;

XX DT 20-MAY-2004 (first entry)

XX DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #473.

XX KW Human; VEGF co-regulated chemokine-1; VCC-1;
 KW vascular endothelial growth factor; ss; antisense compound;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; antisense oligonucleotide; diabetes;
 KW immunological disorder; cardiovascular disorder; neurological disorder;
 KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
 KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
 KW fibrosis; myocardial infarction; wound healing; bone fracture;
 KW cartilage damage; tissue regeneration; organ regeneration;
 KW periodontal disease; gut regeneration; atrial fibrillation.

XX OS Homo sapiens.

XX FN WO2004016224-A2.

XX PD 26-FEB-2004.

XX PF 19-AUG-2003; 2003WO-US025891.

XX PR 19-AUG-2002; 2002US-0404484P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Weinstein EJ;

XX DR WPI; 2004-192065/18.

XX PT New antisense compounds targeted to a nucleic acid molecule encoding
 PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
 PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
 PT neurologic disorder.

XX PS Claim 4; SEQ ID NO 473; 336pp; English.

XX CC The invention relates to an antisense compound targeted to a nucleic acid
 CC molecule encoding human vascular endothelial growth factor (VEGF) co-
 CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
 CC inhibits the expression of VCC-1. The invention also relates to a
 CC composition comprising the antisense compound, a method of inhibiting the
 CC expression of VCC-1 in cells or tissues comprising contacting the cells
 CC or tissues with the antisense compound and a method of treating a human
 CC having a disease or condition associated with VCC-1 comprising
 CC administering the antisense compound to an animal to inhibit expression
 CC of VCC-1. The antisense oligonucleotide comprises at least one modified

CC internucleoside linkage, preferably a phosphorothioate linkage. It also
 CC comprises at least one modified sugar moiety, preferably a 2'-O-
 CC methoxyethyl sugar moiety, and at least one modified nucleobase,
 CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
 CC is a chimeric oligonucleotide. The antisense compound is useful for
 CC treating a disease or condition associated with VCC-1, such as diabetes,
 CC an immunological disorder, a cardiovascular disorder, a neurological
 CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic
 CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
 CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
 CC antisense oligonucleotides may also be used for wound healing, for
 CC healing of bone fractures and cartilage damage, for regeneration of
 CC tissues or organs, for treating periodontal diseases, for gut protection
 CC or regeneration, for treatment of lung or liver fibrosis or for
 CC management of atrial fibrillation. This sequence represents an antisense
 CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
 CC the invention.

SQ Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1176 CTTCTATGAGATGGC 1190

Db 18 CTTCTAGGAGATGGC 4
 |||||

RESULT 2383

ADL00909/c

ID ADL00909 standard; DNA; 20 BP.

XX AC ADL00909;

XX DT 20-MAY-2004 (first entry)

XX DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #442.

XX KW Human; VEGF co-regulated chemokine-1; VCC-1;
 KW vascular endothelial growth factor; ss; antisense compound;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; antisense oligonucleotide; diabetes;
 KW immunological disorder; cardiovascular disorder; neurological disorder;
 KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
 KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
 KW fibrosis; myocardial infarction; wound healing; bone fracture;
 KW cartilage damage; tissue regeneration; organ regeneration;
 KW periodontal disease; gut regeneration; atrial fibrillation.

XX OS Homo sapiens.

XX FN WO2004016224-A2.

XX PD 26-FEB-2004.

XX PF 19-AUG-2003; 2003WO-US025891.

XX PR 19-AUG-2002; 2002US-0404484P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Weinstein EJ;

XX DR WPI; 2004-192065/18.

XX PT New antisense compounds targeted to a nucleic acid molecule encoding
 PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
 PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
 PT neurologic disorder.

XX PS Claim 4; SEQ ID NO 442; 336pp; English.

Sequence 20 BP: 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

CC antisense oligonucleotides may also be used for wound healing, for
CC healing of bone fractures and cartilage damage, for regeneration of
CC tissues or organs, for treating periodontal diseases, for gut protection
CC or regeneration, for treatment of lung or liver fibrosis or for
CC management of atrial fibrillation. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC the invention.

XX
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

| | | | | | |
|----|-----------------------|--|--------------------|---------|------------|
| CC | Sequence | 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other; | | | |
| CC | Query Match | 0.8%; | Score 13.4; | DB 1; | Length 20; |
| CC | Best Local Similarity | 93.3%; | Pred. No. 1.2e+03; | | |
| CC | Matches | 14; Conservative | 1; Indels | 0; Gaps | 0; |
| XX | | | | | |
| XX | | | | | |
| SQ | | | | | |
| OY | 1176 | CTTCTATGAGATGCC | 1190 | | |
| | | | | | |
| D8 | 15 | CTTCTAGGAGATGCC | 1 | | |

```
Query Match          0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

15 CTTCTAGGAGATGGC 1

RESULT 2385
ADL01249/c
ID ADL01249 standard; DNA; 20 BP.
XX
XX
AC ADL01249;
XX
XX 20-MAY-2004 (first entry)
DT
XX
DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #782.
XX

| | |
|---|-----------------------|
| RESULT 2385 | |
| ADL01249/c | |
| ID ADL01249 | standard; DNA; 20 BP. |
| XX | |
| XX | |
| AC ADL01249; | |
| XX | |
| XX | |
| DT 20-MAY-2004 | (first entry) |
| XX | |
| DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #782. | |
| XX | |
| KW Human; VEGF co-regulated chemokine-1; VCC-1; | |
| KW vascular endothelial growth factor; ss; antisense compound; | |
| KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; | |
| KW 5-methylcytosine; antisense oligonucleotide; diabetes; | |
| KW immunological disorder; cardiovascular disorder; neurological disorder; | |
| KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma; | |
| KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis; | |
| KW fibrosis; myocardial infarction; wound healing; bone fracture; | |
| KW cartilage damage; tissue regeneration; organ regeneration; | |
| KW pericardial disease; gut regeneration; atrial fibrillation. | |

KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW

KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;

ischaemia; reperfusion injury; cancer; angioecnic disorder; naemangioma; tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis; fibrosis; myocardial infarction; wound healing; bone fracture;

KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW myocardial infarction; wound healing; bone fracture;
KW myocardial infarction; wound healing; bone fracture;
KW myocardial infarction; wound healing; bone fracture;

| | |
|----|---|
| KW | periodontal disease; gut regeneration; atrial fibrillation. |
| XX | |
| | Homo sapiens |

OS Homo sapiens.

PN W02004016224-A2.

FT FT /note= "phosphorothioate linkages and all cytidine
 FT FT residues are 5-methylcytidines"
 FT FT 1..5
 FT FT /*tag= a
 FT FT /mod_base= OTHER
 FT FT /note= "2'-O-methoxyethyls"
 FT FT 16..20
 FT FT /*tag= c
 FT FT /mod_base= OTHER
 FT FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX
 XX 08-APR-2004.
 XX
 XX 25-SEP-2003; 2003WO-US030374.
 XX
 XX 25-SEP-2002; 2002US-0413549P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 XX
 XX WPI; 2004-305094/28.
 DR
 XX
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 XX Claim 4; SEQ ID NO 536; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 XX Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 511 TACTGTGAGAGCTG 525
 Db 20 TACTGTGAGAGCTG 6
 RESULT 2388
 ADO13818/c
 ID ADO13818 standard; DNA; 20 BP.
 XX
 XX ADO13818;
 XX
 XX 15-JUL-2004 (first entry)
 DT
 XX Microsatellite analysis primer #48.
 DE
 XX ss; antiarteriosclerotic; laminin A; mutation; diagnosis;
 KW

KW progeroid disease; Hutchinson-Gilford Progeria Syndrome;
 XX arteriosclerosis; atherosclerosis; primer; chromosome 1.
 OS Homo sapiens.
 XX WO2004035753-A2.
 PN
 XX 29-APR-2004.
 PD
 XX 17-OCT-2003; 2003WO-US033058.
 PF
 XX 18-OCT-2002; 2002US-0419541P.
 PR
 XX 14-APR-2003; 2003US-0463084P.
 PD
 XX (PROG-) PROGERIA RES FOUND INC.
 PA (NYME-) NEW YORK STATE OFFICE MENTAL HEALTH.
 PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 XX Eriksson MBH, Collins FS, Gordon LB, Brown TW;
 PI WPI; 2004-348447/32.
 DR
 XX Detecting a biological condition associated with a dominant laminin A
 PT (LMNA) mutation, useful for diagnosing, preventing or treating a
 PT progeroid disease that is Hutchinson-Gilford Progeria Syndrome, and/or
 PT arteriosclerosis.
 PT
 XX Example 1; SEQ ID NO 55; 85pp; English.
 PS
 XX The invention relates to a method of detecting a biological condition
 CC associated with a dominant laminin A (LMNA) mutation in a subject
 CC comprising determining whether a subject has mutation in LMNA, and where
 CC the mutation comprises a variant nucleic acid sequence in or
 CC corresponding to codon 608, 644, 145, 471, 527 or 269 of human LMNA, or
 CC two or more mutations. The methods and compositions of the present
 CC invention are useful for the diagnosis, prevention and/or treatment of
 CC diseases or conditions associated with the mutation of LMNA, such as
 CC progeroid disease that is Hutchinson-Gilford Progeria Syndrome, or
 CC arteriosclerosis or atherosclerosis. This sequence corresponds to a
 CC primer used in a microsatellite analysis of chromosome 1q21.3-23.1
 CC containing the laminin A gene.
 XX
 SQ Sequence 20 BP; 7 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1197 CCGTCCCTCTTCC 1211
 Db 15 CCGTCCCTCTTCC 1
 RESULT 2389
 ADO54290
 ID ADO54290 standard; DNA; 20 BP.
 XX
 XX ADO54290;
 AC
 XX 15-JUL-2004 (first entry)
 DT
 XX Farnesoid X receptor gene expression antisense inhibitory oligo #1663.
 DE
 XX ss; anti-diabetic; immunosuppressive; cardiovascular; antilipemic;
 KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 XX Homo sapiens.
 OS

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XX PN WO2004030750-A1.
XX PD 15-APR-2004.
XX PF 25-SEP-2003; 2003WO-US030353.
XX PR 25-SEP-2002; 2002US-0413588P.
XX PA (PHAA ) PHARMACIA CORP.
XX PT Kane CD;
XX WPI; 2004-347928/32.
XX New antisense oligonucleotides useful for modulating expression of
PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
PT e.g. diabetes, immunological disorders, cardiovascular disorders,
PT gallstones or obesity.
XX Claim 4; SEQ ID NO 1663; 150pp; English.
XX The invention relates to an antisense compound 8-30 nucleobases in length
CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
CC where the antisense compound specifically hybridizes with and inhibits
CC the expression of FXR. The composition and methods are useful for
CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
CC tissues, or for treating diseases or conditions associated with FXR, such
CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
CC lipoprotein), elevated LDL (low density lipoprotein) or
CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
CC neurological disorders, or ischemia/reperfusion injury. In addition, the
CC composition is used for diagnostics, prophylaxis, or as research reagents
CC or kits. This sequence corresponds to an antisense oligonucleotide of the
CC invention.
XX SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1661 CCCCTCACAGGCGAG 1675
Db 1 CCCCTCACAGGTCAG 15

RESULT 2390
ID AD052403
AD052403 standard; DNA; 20 BP.
XX AC AD052403;
XX 12-AUG-2004 (first entry)
XX Human BRCA2 region transcription unit CG005 antisense oligonucleotide #8.
XX Human; BRCA2 region transcription unit CG005; ss;
XX antisense oligonucleotide; phosphorothioate linkage;
XX 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
XX hyperproliferative disorder; cancer; cytostatic.
XX OS Homo sapiens.
XX US2004097442-A1.
XX 20-MAY-2004.
XX 16-NOV-2002; 2002US-00298354.
XX 16-NOV-2002; 2002US-00298354.

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PA (ISIS-) ISIS PHARM INC.
XX XX Dobie KW;
XX WPI; 2004-389185/36.
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding BRCA2 region transcription unit CG005, useful for treating
PT diseases hyperproliferative disorders.
XX Example 15; SEQ ID NO 18; 37pp; English.
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human BRCA2 region transcription unit CG005 polypeptide. The
CC compound is an antisense oligonucleotide that specifically hybridizes
CC with the nucleic acid and inhibits expression of the polypeptide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
CC modified nucleobase comprising a 5-methylcytosine. The antisense
CC compounds are useful for modulating the expression of the human BRCA2
CC region transcription unit CG005 polypeptide and in preparation of a
CC composition for treating hyperproliferative disorders, e.g. cancer. This
CC sequence represents an antisense oligonucleotide targeted to DNA encoding
CC the human BRCA2 region transcription unit CG005 polypeptide of the
CC invention.
XX SQ Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 526 ACCCTCAATAGCCCC 540
Db 6 ACCCTCAATAGCCCC 20

RESULT 2391
ADP76527/c
ID ADP76527 standard; DNA; 20 BP.
XX AC ADP76527;
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #326.
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..4 /tag= a
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
FT modified_base 17..20 /tag= b
FT /mod_base= other
FT /note= "2-methoxyethyl wing"
XX WO2004035763-A2.
XX 29-APR-2004.
XX 02-OCT-2003; 2003WO-US033332.
XX 17-OCT-2002; 2002US-0419268P.
XX (PHAA ) PHARMACIA CORP.

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XX Broschat KO, Crosby SD;
 XX WPI; 2004-348453/32.
 DR
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
 PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
 PT ischemia/reperfusion injury.
 XX
 XX Claim 4; SEQ ID NO 326; 175pp; English.
 PS
 XX The present invention relates to a compound which specifically hybridizes
 XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
 CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
 CC modulating the expression of GFAT, and which comprise any of the 3063
 CC sequences of 20 base pairs, given in the specification. The compound,
 CC composition and methods are useful for treating a disease or condition,
 CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
 CC They are also useful in research and diagnostics for modulating the
 CC expression of GFAT. The present sequence represents a chimeric
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
 CC oligonucleotides inhibit human GFAT expression.
 XX
 XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Mismatches 1; Indels 0; Gaps 0;

QY 131 GGATGAAGAGATCA 145
 Db 16 GGATGAAGAGATTCA 2
 |||||
 |||||

RESULT 2392
 ADP10952
 ID ADP10952 standard; DNA; 20 BP.
 XX
 XX ADP10952;
 AC
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE Set 1 left PCR primer for marker #297.
 XX
 XX transplant rejection; immune system; rheumatoid arthritis; lupus;
 KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
 KW
 XX Homo sapiens.
 OS
 XX WO2004042346-A2.
 PN
 XX
 PD 21-MAY-2004.
 XX
 XX 24-APR-2003; 2003WO-US012946.
 PF
 XX 24-APR-2002; 2002US-00131831.
 PR
 XX 20-DEC-2002; 2002US-00325899.
 XX
 XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
 PA
 XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
 PI Rosenberg S;
 PI
 XX WPI; 2004-400724/37.
 DR
 XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 PT rejection, in an individual, comprises detecting the expression level of
 PT the genes.
 PT
 XX Claim 58; SEQ ID NO 961; 1762pp; English.
 PS

XX The present invention relates to diagnosing or monitoring transplant
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprises detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
 CC viral, bacterial or fungal infection. The present sequence represents a
 CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
 CC of allograft rejection and other disorders.
 XX
 XX Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 1.2e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Mismatches 1; Indels 0; Gaps 0;

QY 822 GAAGTCCCTCACCT 836
 Db 1 GAAGCCCCCTCACCT 15
 |||||
 |||||

RESULT 2393
 ADP12224
 ID ADP12224 standard; DNA; 20 BP.
 XX
 XX ADP12224;
 AC
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE Tagman probe set 2 #82.
 XX
 XX transplant rejection; immune system; rheumatoid arthritis; lupus;
 KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
 KW
 XX Homo sapiens.
 OS
 XX WO2004042346-A2.
 PN
 XX
 PD 21-MAY-2004.
 XX
 XX 24-APR-2003; 2003WO-US012946.
 PF
 XX 24-APR-2002; 2002US-00131831.
 PR
 XX 20-DEC-2002; 2002US-00325899.
 XX
 XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
 PA
 XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
 PI Rosenberg S;
 PI
 XX WPI; 2004-400724/37.
 DR
 XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 PT rejection, in an individual, comprises detecting the expression level of
 PT the genes.
 PT
 XX Claim 58; SEQ ID NO 2233; 1762pp; English.
 PS
 XX The present invention relates to diagnosing or monitoring transplant
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprises detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual.

CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC probe for a 50 mer oligonucleotide marker for diagnosis and monitoring of
CC allograft rejection and other disorders.

XX
SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 GGAGGCCCGCGGCGC 90
|||||
Db 6 GGAGAGCCCGCGGCGC 20

RESULT 2394
ADP43749
ID ADP43749 standard; DNA; 20 BP.
XX
AC ADP43749;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human fibrillarin antisense oligonucleotide, ISIS 172821.
XX
KW Fibrillarin; FBL; FIB1; FLRN; 34-kD nucleolar scleroderma antigen;
KW hyperproliferative disorder; cancer; human; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.

XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone in which all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) bases"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) bases"

XX
FN US2004102403-A1.
XX
PD 27-MAY-2004.
XX
PF 21-NOV-2002; 2002US-00304111.
XX
PR 21-NOV-2002; 2002US-00304111.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dean NM, Dobie KW;
XX
DR WPI; 2004-399733/37.
XX
PT New compound targeted to a nucleic acid molecule encoding fibrillarin,
PT useful in diagnosing and treating hyperproliferative disorder.

XX
PS Example 15; SEQ ID NO 24; 37pp; English.
XX
CC The invention relates to compounds, compositions and methods for
CC modulating the expression of fibrillarin (also called FBL, FIB, FIB1,
CC FLRN and 34-kD nucleolar scleroderma antigen). The composition comprise
CC antisense oligonucleotides targeted to fibrillarin. The compound and

CC methods are useful in diagnosing and treating hyperproliferative
CC disorders e.g., cancer. The present sequence is an antisense
CC oligonucleotide targeted to human fibrillarin DNA. This sequence is used
CC to illustrate the method of the invention.

XX
SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 182 GCATAGACAAGACCA 196
|||||
Db 6 GCATAGACTAGACCA 20

RESULT 2395
ADP27173
ID ADP27173 standard; DNA; 20 BP.
XX
AC ADP27173;
XX
DT 26-AUG-2004 (first entry)
XX
DE Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #4.
XX
KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS Rattus norvegicus.
XX
FN US2004110152-A1.
XX
PD 10-JUN-2004.
XX
PF 10-DEC-2002; 2002US-00316755.
XX
PR 10-DEC-2002; 2002US-00316755.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
DR WPI; 2004-440341/41.
XX
PT New oligonucleotide compound that inhibits expression of matrix
PT metalloproteinase 11, useful for preparing a composition for treating
PT hyperproliferative disorder, e.g., cancer.

XX
PS Example 16; SEQ ID NO 99; 76pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
CC is an antisense oligonucleotide that specifically hybridises with the
CC nucleic acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the MMP11 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents an antisense oligonucleotide
CC targeted to DNA encoding the rat MMP11 polypeptide of the invention.

XX
SQ Sequence 20 BP; 2 A; 9 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1040 GCCTGGCCCGAGCCA 1054
|||||

Db 1 GCCTGGCCCGGCCA 15

RESULT 2396
ADP27304/C
ID ADP27304 standard; DNA; 20 BP.
XX
AC
XX ADP27304;
XX
DT 26-AUG-2004 (first entry)
XX
DE Rat MMP11 DNA antisense oligonucleotide target region #2.
XX
KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS Rattus norvegicus.
XX
PN US2004110152-A1.
XX
PD 10-JUN-2004.
XX
PF 10-DEC-2002; 2002US-00316755.
XX
PR 10-DEC-2002; 2002US-00316755.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
DR WPI; 2004-440341/41.
XX
XX New oligonucleotide compound that inhibits expression of matrix
PT metalloproteinase 11, useful for preparing a composition for treating
PT hyperproliferative disorder, e.g., cancer.
XX
PS Example 16; SEQ ID NO 230; 76pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
CC is an antisense oligonucleotide that specifically hybridizes with the
CC nucleic acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the MMP11 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a rat MMP11 DNA antisense
CC oligonucleotide target region of the invention.
XX
SQ Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1040 GCCTGGCCCGGCCA 1054
Db 20 GCCTGGCCCGGCCA 6
RESULT 2397
ADP19918/C
ID ADP19918 standard; DNA; 20 BP.
XX
AC ADP19918;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human ABC2 DNA antisense oligonucleotide #34.
XX

KW Human; ABC2; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; drug clearance;
XX ATP-binding cassette subfamily C.
OS Homo sapiens.
XX
PN US2004110699-A1.
XX
PD 10-JUN-2004.
XX
PF 10-DEC-2002; 2002US-00316389.
XX
PR 10-DEC-2002; 2002US-00316389.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
DR WPI; 2004-440379/41.
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding ATP-binding cassette C2 (ABC2), useful for treating disease or
PT condition that affects drug clearance.
XX
PS Example 15; SEQ ID NO 45; 54pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human ATP-binding cassette subfamily C (ABC2) polypeptide.
CC The compound is an antisense oligonucleotide that specifically hybridizes
CC with the nucleic acid and inhibits expression of the polypeptide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
CC modified nucleobase comprising a 5-methylcytosine. The antisense
CC compounds are useful for modulating the expression of the human ABC2
CC polypeptide and in preparation of a composition for treating disorders
CC associated with ABC2, such as diseases or conditions that affect drug
CC clearance. This sequence represents DNA encoding the human ABC2
CC polypeptide of the invention. This sequence represents an antisense
CC oligonucleotide targeted to human ABC2 DNA of the invention.
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. NO. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1613 AAGCCACAGCCGAG 1627
Db 19 AAGCCACAGCCGAG 5
RESULT 2398
ADP85681
ID ADP85681 standard; DNA; 20 BP.
XX
AC ADP85681;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human Talin antisense oligonucleotide, ISIS #109125.
XX
KW Antisense; Talin; muscular disorder; haematologic disorder;
KW cardiac disorder; hyperproliferative disorder; cancer; human;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1.20
FT /*tag= b
FT /mod_base= OTHER

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FT FT /note= "Phosphorothioate backbone where all cytidine
FT FT residues are 5-methylcytidines"
FT modified_base 1.5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX XX
PN US2004110705-A1.
XX XX
PD 10-JUN-2004.
XX XX
PF 11-SEP-2003; 2003US-00415463.
XX XX
PR 30-OCT-2000; 2000US-00702251.
PR 30-OCT-2001; 2001WO-US047585.
XX XX
PA (BENN/) BENNETT C F.
PA (COWS/) COWSERT L M.
XX XX
PI Bennett CF, Cowsert LM;
XX WPI; 2004-440384/41.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding talin, useful for treating muscular, cardiac,
PT hematologic, or hyperproliferative disorders.
XX
PS Claim 3; SEQ ID NO 26; 48pp; English.
XX
CC The invention relates to novel antisense compounds targeted to a nucleic
CC acid molecule encoding human Talin to and inhibit its expression. The
CC invention is useful for treating a disease or condition associated with
CC Talin such as a disease or condition e.g. muscular, haematologic, cardiac
CC or hyperproliferative disorder such as cancer. The present sequence is an
CC antisense oligonucleotide targeted to human Talin DNA.
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1537 AAGGAGGCCAGCCTT 1551
DB 1 AAGGAAGCCAGCCTT 15
RESULT 2399
ADP21189/c
ID ADP21189 standard; DNA; 20 BP.
XX
AC ADP21189;
XX
DT 09-SEP-2004 (first entry)
XX
DE Heavy chain variable region (VH) 5' PCR primer hVH4a.1, SEQ:4.
XX
KW Human; antibody; immunoglobulin; antigen-specific lymphocyte;
KW B-lymphocyte; T-lymphocyte; microwell chip; detection; isolation;
KW selection; antigen-specific receptor; monoclonal antibody;
KW T-cell receptor; immunotherapy; gene therapy; variable region;
KW heavy chain; VH; PCR; primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2004051266-A1.
XX
PD 17-JUN-2004.

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XX 30-SEP-2003; 2003WO-JP012500.
PF
XX 14-NOV-2002; 2002JP-0031031.
PR 29-NOV-2002; 2002JP-00346728.
XX
PA (MURA/) MURAGUCHI A.
PA (KISH/) KISHI H.
PA (TAMI/) TAMIYA E.
PA (SUZU/) SUZUKI M.
XX
PI Muraguchi A, Kishi H, Tamiya E, Suzuki M;
XX WPI; 2004-461173/43.
XX
PT Microwell array chip for detecting antigen specific lymphocyte, has shape
PT and dimension to store lymphocyte in microwell.
XX
PS Example 5; SEQ ID NO 4; 92pp; Japanese.
XX
CC The invention relates to a microwell array chip for detecting a single
CC antigen-specific lymphocyte. Each microwell of the chip has the shape and
CC size to accommodate one lymphocyte only. The lymphocyte may be a B or a T
CC lymphocyte. The invention also relates to methods for detecting,
CC isolating and selecting an antigen-specific lymphocyte; a method of
CC cloning a gene encoding an antigen-specific receptor (e.g., an
CC immunoglobulin or a T-cell receptor) from an antigen-specific lymphocyte
CC via reverse transcription-PCR (RT-PCR); a method of manufacturing a
CC monoclonal antibody using an antigen-specific immunoglobulin gene cloned
CC using the cloning method of the invention; and a method of manufacturing
CC gene therapy material using an antigen-specific T-cell receptor gene
CC cloned using the cloning method. The method of the invention is useful
CC for the efficient detection of a single antigen-specific lymphocyte,
CC genes from which may be isolated and cloned for use in various
CC immunotherapy and gene therapy methods. Sequences ADP21186-ADP21233
CC represent PCR primers used to clone the heavy and light chain variable
CC regions (ADP21234 and ADP21236) of an antibody produced by a single human
CC B lymphocyte.
XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 1 Other;
Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 82.4%; Pred. No. 1.2e+03;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 951 CTGCCACCGCAGAGG 967
DB 18 CTGCCACCGCAGAGG 2
RESULT 2400
ADP68849
ID ADP68849 standard; DNA; 20 BP.
XX
AC ADP68849;
XX
DT 09-SEP-2004 (first entry)
XX
DE Rice histone deacetylase 3 primer seqid 9.
XX
KW histone deacetylase; HDAC; OshDAC2; OshDAC3; plant; growth rate;
KW stress condition; drought; cold; rice; histone deacetylase 3; HDAC3; PCR;
KW primer; ss.
XX
OS Oryza sativa.
XX US2004123348-A1.
XX
PN 24-JUN-2004.
XX
PD 18-DEC-2002; 2002US-00321732.
XX
PF 18-DEC-2002; 2002US-00321732.
XX
PD 18-DEC-2002; 2002US-00321732.

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```
XX (JANG/) JANG I.  
PA (PAHK/) PAHK Y.  
PA (SONG/) SONG S.  
PA (KIM/) KIM J.  
PA (NAHM/) NAHM B.  
XX  
PI Jang I, Pahn Y, Song S, Kim J, Nahm B;  
XX WPI; 2004-479812/45.  
XX  
XX New histone deacetylase (HDAC) proteins, OSHDAC1, OSHDAC2 and OSHDAC3,  
PT useful for developing a plant body which can be maintained at a high  
PT growth rate even under stress conditions e.g., drought.  
XX  
XX Example 1; SEQ ID NO 9; 12pp; English.  
XX  
XX The invention describes histone deacetylase (HDAC) proteins OSHDAC1,  
CC OSHDAC2 and OSHDAC3 comprising amino acid sequences of 518, 498 and 510  
CC amino acids having a function of histone deacetylase. Also described are:  
CC a gene coding for OSHDAC1 above or OSHDAC1 gene coding for OSHDAC1 above  
CC comprising an sequence of SEQ ID NO: 1; a gene coding for OSHDAC2 above  
CC or OSHDAC2 gene coding for OSHDAC2 above comprising a sequence of SEQ ID  
CC NO: 2; a gene coding for OSHDAC3 above or OSHDAC3 gene coding for OSHDAC3  
CC comprising an amino acid sequence of SEQ ID NO: 3; and a method for  
CC producing a plant having a high growth rate. The proteins are useful for  
CC developing a plant body which can be maintained at a high growth rate  
CC even under stress conditions including drought, cold, etc, as well as  
CC under normal conditions. This sequence represents a primer used in the  
CC isolation of a rice histone deacetylase 3 (HDAC3) polynucleotide for use  
CC as a probe in the recognition of HDAC sequences.  
XX  
XX Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
SQ  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 312 CAGCTCTGCACCGA 326  
Db 4 CAGCTATGCACCGA 18  
  
RESULT 2401  
ADP43632/C  
ID ADP43632 standard; DNA; 20 BP.  
XX  
XX ADP43632;  
XX  
XX 09-SEP-2004 (first entry)  
XX  
XX Human MAD1-like 1 target sequence ISIS 191885.  
XX  
XX ss; human; MAD1-like 1; hyperproliferative disorder; cancer.  
XX  
XX Homo sapiens.  
XX  
XX US2004115650-A1.  
XX  
XX 17-JUN-2004.  
XX  
XX 12-DEC-2002; 2002US-00319908.  
XX  
XX 12-DEC-2002; 2002US-00319908.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW, Jain R;  
XX  
XX WPI; 2004-449387/42.  
XX  
XX New oligonucleotide compound that inhibits expression of MAD1-like 1,  
PT useful for preparing a composition for treating hyperproliferative
```

```
PT disorder, e.g., cancer.  
XX  
XX Example 15; SEQ ID NO 131; 206pp; English.  
XX  
XX The invention relates to a new compound targeted to a nucleic acid  
CC encoding MAD1-like 1 which specifically hybridises with the nucleic acid  
CC encoding MAD1-like 1 and inhibits expression of MAD1-like 1. The  
CC oligonucleotide compound is useful for preparing a composition for  
CC treating hyperproliferative disorder, e.g. cancer. The present sequence  
CC represents a human MAD1-like 1 target sequence.  
XX  
XX Sequence 20 BP; 1 A; 7 C; 8 G; 4 T; 0 U; 0 Other;  
SQ  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1628 GCCCCAGCAGGCAGC 1642  
Db 15 GCCCCAGCAGGAAGC 1  
  
RESULT 2402  
ADP43570  
ID ADP43570 standard; DNA; 20 BP.  
XX  
XX AC ADP43570;  
XX  
XX 09-SEP-2004 (first entry)  
XX  
XX Human MAD1-like 1 antisense oligonucleotide ISIS 275667.  
XX  
XX ss; human; antisense; MAD1-like 1; hyperproliferative disorder; cancer.  
XX  
XX Homo sapiens.  
XX  
XX Synthetic.  
XX  
XX US2004115650-A1.  
XX  
XX 17-JUN-2004.  
XX  
XX 12-DEC-2002; 2002US-00319908.  
XX  
XX 12-DEC-2002; 2002US-00319908.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Dobie KW, Jain R;  
XX  
XX WPI; 2004-449387/42.  
XX  
XX New oligonucleotide compound that inhibits expression of MAD1-like 1,  
PT useful for preparing a composition for treating hyperproliferative  
PT disorder, e.g., cancer.  
XX  
XX Example 15; SEQ ID NO 69; 206pp; English.  
XX  
XX The invention relates to a new compound targeted to a nucleic acid  
CC encoding MAD1-like 1 which specifically hybridises with the nucleic acid  
CC encoding MAD1-like 1 and inhibits expression of MAD1-like 1. The  
CC oligonucleotide compound is useful for preparing a composition for  
CC treating hyperproliferative disorder, e.g. cancer. The present sequence  
CC represents a human MAD1-like 1 antisense oligonucleotide.  
XX  
XX Sequence 20 BP; 4 A; 8 C; 7 G; 1 T; 0 U; 0 Other;  
SQ  
  
Query Match 0.8%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 1.2e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1628 GCCCCAGCAGGCAGC 1642  
Db 6 GCCCCAGCAGGAAGC 20
```

Qy 510 CTACCTGGAGAGCT 524
 |||||
 Db 15 CTACCTGGAGATGCT 1

RESULT 2404
 ADQ08108
 ID AQ08108 standard; DNA; 20 BP.
 XX AC ADQ08108;
 XX DT 23-SRP-2004 (first entry)
 XX DE Human beta-site APP-cleaving enzyme 2 DNA target region #8.
 XX
 KW Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FH modified_base 1..20
 FT FT /*tag= b
 FT FT /mod_base= OTHER
 FT FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT FT are 5-methylcytidines"
 FT FT modified_base 1..5
 FT FT /*tag= a
 FT FT /mod_base= OTHER
 FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT FT modified_base 15..20
 FT FT /*tag= c
 FT FT /mod_base= OTHER
 FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 XX
 US 20041132681-A1.
 XX
 PD 08-JUL-2004.
 XX
 XX 16-SRP-2003; 2003US-00663452.
 XX
 XX 04-JUN-2002; 2002US-00163272.
 XX
 XX (DOI/) DOBIE K W.
 PA
 XX Dobie KW;
 XX
 XX WPI; 2004-517033/49.
 XX
 PT New antisense compound, useful for treating diseases associated with
 PT expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2
 PT such as sporadic inclusion-body myositis and cancer.
 XX
 XX Example 15; SEQ ID NO 96; 61pp; English.
 XX
 CC The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The
 CC compound is an antisense oligonucleotide that specifically hybridizes
 CC with the nucleic acid and inhibits expression of the polypeptide. The
 CC antisense oligonucleotide comprises at least one modified internucleoside
 CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
 CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
 CC modified nucleobase comprising a 5-methylcytosine. The antisense
 CC compounds are useful for modulating the expression of the human beta-site
 CC APP-cleaving enzyme 2 polypeptide and for treating diseases associated
 CC with expression of beta-site APP-cleaving enzyme 2 such as sporadic
 CC inclusion-body myositis and cancer. This sequence represents a human beta
 CC -site APP-cleaving enzyme 2 DNA antisense oligonucleotide target region
 CC of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCT 524
|||||
Db 6 CTACCTGGAGATGCT 20

RESULT 2405
ADP98043/c
ID ADP98043 standard; DNA; 20 BP.
XX
AC ADP98043;
XX
DT 23-SEP-2004 (first entry)
XX
DE C. albicans specific gene, CAYB081C, identification primer A.
XX
KW Diploid fungal cell; allele; gene disruption cassette;
KW promoter replacement fragment; antifungal; fungicide; gene therapy;
KW infection; Candida albicans; identification; primer; ss.
XX
OS Candida albicans.
OS Unidentified.
XX
XX WO2004056965-A2.
PN
XX
XX 08-JUL-2004.
PD
XX
XX 19-DEC-2003; 2003WO-US040618.
PF
XX
XX 19-DEC-2002; 2002US-0434832P.
PR
XX
PA (ELIT-) ELITRA PHARM INC.
PA (ELIT-) ELITRA CANADA LTD.
XX
XX Roemer T, Jiang B, Boone C, Bussey H;
PI WPI; 2004-500296/47.
XX
XX Constructing a strain of diploid fungal cells in which both alleles of a
PT gene are modified comprises modifying the alleles of a gene in the fungal
PT cells by recombination using a gene disruption cassette and a promoter
PT replacement fragment.
XX
XX Claim 36; SEQ ID NO 4148; 163pp; English.
XX
XX The invention relates to a novel method for constructing a strain of
CC diploid fungal cells in which both alleles of a gene are modified. The
CC method comprises modifying the alleles of a gene in diploid fungal cells
CC by recombination using a gene disruption cassette and a promoter
CC replacement fragment. The invention further comprises: assembling a
CC collection of diploid fungal cells each of which comprises modified
CC alleles of a different gene; a strain of diploid fungal cells comprising
CC modified alleles of a gene, where the first allele of the gene is
CC inactivated by a gene disruption cassette comprising a nucleotide
CC sequence encoding an expressible selectable marker; and the expression of
CC the second allele of the gene is regulated by a heterologous promoter
CC that is operably linked to the coding region of the second allele of the
CC gene, and where the gene encodes the polypeptide mentioned above; a
CC collection of diploid fungal strains comprising the diploid strains cited
CC above, where substantially all the different genes that encode the above
CC amino acid sequences are modified and are present in different diploid
CC strains in the collection; a nucleic acid molecule microarray comprising
CC nucleic acid molecules, where each nucleic acid molecule comprises a
CC nucleotide sequence that is hybridizable to a target nucleotide sequence
CC comprising any of the 310 nucleotide sequences listed in the
CC specification (ADP9816-ADP9825); identifying a gene that is essential
CC to the survival or growth of a fungus, that contributes to the virulence
CC and/or pathogenicity of a fungus, or that contributes to the resistance
CC of a diploid fungus to an antifungal agent; identifying an antifungal

CC agent that inhibits the growth of a diploid fungus, or a therapeutic
CC agent for treatment of a mammalian disease; correlating changes in the
CC levels of proteins or gene transcripts with the inhibition of growth or
CC proliferation of a diploid fungal cell; a purified or isolated nucleic
CC acid molecule comprising a nucleotide sequence encoding a gene product
CC required for proliferation of Candida albicans, where the gene product
CC consists of any of the above-mentioned amino acid sequences; a vector
CC comprising a promoter operably linked to the nucleic acid molecule cited
CC above; a host cell containing the vector; a purified or isolated
CC polypeptide comprising any of the 61 amino acid sequences given in the
CC specification (ADP96718-ADP96778); a fusion protein comprising a fragment
CC of a first polypeptide fused to a second polypeptide, the fragment
CC consisting of at least 6 consecutive residues of any of ADP9826-ADP99135
CC; producing a polypeptide; identifying a compound which modulates the
CC activity of a gene product encoded by a nucleic acid comprising any of
CC ADP9816-ADP9825; eliciting an immune response in an animal; a strain of
CC Candida albicans, where a first allele of a gene comprising any of
CC ADP9816-ADP9825 is inactive and a second allele of the gene is under
CC the control of a heterologous promoter; identifying a compound or binding
CC partner that binds to the polypeptide comprising any of ADP9826-
CC ADP99135, or its fragment; identifying a compound having the ability to
CC inhibit growth or proliferation of Candida albicans; inhibiting growth or
CC proliferation of Candida albicans cells; manufacturing an antimycotic
CC compound; treating an infection of a subject by Candida albicans;
CC preventing or containing contamination of an object by Candida albicans,
CC or for preventing or inhibiting formation on a surface of a biofilm
CC comprising Candida albicans; a pharmaceutical composition comprising a
CC therapeutic amount of an agent which reduces the activity or level of a
CC gene product encoded by a nucleic acid comprising any of ADP9816-
CC ADP9825 in a pharmaceutical carrier; an antibody preparation which binds
CC the polypeptide; methods for evaluating a compound against a target gene
CC product encoded by any of ADP9816-ADP9825; identifying an antimycotic
CC compound; a computer or a computer readable medium that comprises at
CC least one of the nucleotide sequences mentioned in the specification or
CC at least one amino acid sequence selected from ADP9826-ADP99135; a
CC method assisted by a computer for identifying a putatively essential gene
CC of a fungus; and a protein array comprising proteins, where at least one
CC protein comprises an amino acid sequence or a portion of an amino acid
CC sequence selected from ADP9816-ADP9825. The novel methods and
CC compositions have fungicide activity. The compositions may be used in
CC gene therapy. The composition and methods are useful for drug screening
CC purposes or for diagnosing, preventing or treating infections associated
CC with Candida albicans. These may also be used for constructing strains
CC useful for identification and validation of gene products as effective
CC targets for therapeutic intervention, for identifying and validating gene
CC products as effective targets for therapeutic intervention, and for
CC collecting identified essential genes. This polynucleotide sequence
CC represents an identification primer used in the exemplification of the
CC invention. NOTE: This sequence was downloaded from an electronic sequence
CC listing provided on the WIPO website.

XX SQ Sequence 20 BP; 9 A; 11 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 1.2e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 231 TGGTGTGTGTGGCGG 245
|||||
Db 15 TGGTGTGTGTGTGGG 1

RESULT 2406
ABZ89410
ID ABZ89410 standard; DNA; 20 BP.
XX
AC ABZ89410;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX WO200285308-A2.
XX
PN 31-OCT-2002.
XX
PD 23-APR-2002; 2002WO-US013135.
XX
PF 24-APR-2001; 2001US-0286137P.
XX
PR (EPIC-) EPIGENESIS PHARM INC.
XX
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI WPI; 2003-229219/22.
XX
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4652; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 1.3e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1231 CAGCTACACTTCATCTTC 1248
DB 1 CAGTCAGACTTCATCTTC 18

RESULT 2407
ABD25640
ID ABD25640 standard; DNA; 20 BP.
XX
AC ABD25640;
XX
XX 29-JUL-2004 (first entry)
DT
DE AI024215-derived oligonucleotide SEQ ID 4652.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
XX WO200285309-A2.
XX
PN 31-OCT-2002.
XX
PD 23-APR-2002; 2002WO-US013143.
XX
PF 24-APR-2001; 2001US-0286036P.
XX
PR (EPIC-) EPIGENESIS PHARM INC.
XX
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI WPI; 2003-093058/08.
XX
DR
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4652; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposcretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating or
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 1.3e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1231 CAGCTACACTTCATCTTC 1248
DB 1 CAGTCAGACTTCATCTTC 18

RESULT 2407
ABD25640
ID ABD25640 standard; DNA; 20 BP.
XX
AC ABD25640;
XX
XX 29-JUL-2004 (first entry)
DT
DE AI024215-derived oligonucleotide SEQ ID 4652.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;

Search completed: November 2, 2004, 13:06:29
Job time : 59 secs

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OM nucleic - nucleic search, using sw model

Run on: November 2, 2004, 13:28:47 ; Search time 32 Seconds
(without alignments)
3.714 Million cell updates/sec

Title: us-10-017-621-3
Perfect score: 1745
Sequence: 1 tggagcagcgtaagatg.....gttcacctgcccacttgcc 1745

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 1816 seqs, 34058 residues

Total number of hits satisfying chosen parameters: 3632

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1844 summaries

Database : rni db: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match % | Length | DB ID | Description |
|------------|-------|---------------|--------|-------|----------------------|
| 1 | 19 | 1.1 | 19 | 1 | US-09-696-791-464 |
| 2 | 19 | 1.1 | 19 | 1 | US-09-696-791-465 |
| 3 | 18.6 | 1.1 | 25 | 1 | US-09-866-108A-15295 |
| 4 | 17.6 | 1.0 | 25 | 1 | US-08-678-039A-3 |
| 5 | 17.6 | 1.0 | 25 | 1 | US-09-866-108A-15294 |
| 6 | 17.6 | 1.0 | 25 | 1 | US-09-866-108A-15296 |
| 7 | 17.6 | 1.0 | 26 | 1 | US-08-859-998-960 |
| 8 | 17.6 | 1.0 | 26 | 1 | US-09-225-928-960 |
| 9 | 17.6 | 1.0 | 26 | 1 | US-09-225-201B-960 |
| 10 | 17.4 | 1.0 | 19 | 1 | US-09-696-791-343 |
| 11 | 17.4 | 1.0 | 19 | 1 | US-09-696-791-347 |
| 12 | 17 | 1.0 | 20 | 1 | US-08-910-629A-31 |
| 13 | 17 | 1.0 | 20 | 1 | US-09-910-629A-42 |
| 14 | 17 | 1.0 | 20 | 1 | US-09-209-668-7 |
| 15 | 17 | 1.0 | 20 | 1 | US-09-287-796-31 |
| 16 | 17 | 1.0 | 20 | 1 | US-09-287-796-42 |
| 17 | 17 | 1.0 | 20 | 1 | US-09-130-616-31 |
| 18 | 17 | 1.0 | 20 | 1 | US-09-130-616-42 |
| 19 | 17 | 1.0 | 25 | 1 | US-09-300-958A-73 |
| 20 | 16.8 | 1.0 | 21 | 1 | US-08-538-666-11 |
| 21 | 16.8 | 1.0 | 21 | 1 | US-08-538-666-17 |
| 22 | 16.6 | 1.0 | 21 | 1 | US-09-657-472-2176 |
| 23 | 16.6 | 1.0 | 24 | 1 | US-08-785-247-21 |
| 24 | 16.6 | 1.0 | 24 | 1 | US-09-347-114A-109 |
| 25 | 16.6 | 1.0 | 25 | 1 | US-09-827-998-1391 |
| 26 | 16.6 | 1.0 | 25 | 1 | US-09-827-998-1392 |
| 27 | 16.6 | 1.0 | 25 | 1 | US-09-827-998-1393 |
| 28 | 16.6 | 1.0 | 25 | 1 | US-09-866-108A-15293 |
| 29 | 16.6 | 1.0 | 25 | 1 | US-09-866-108A-15297 |
| 30 | 16.4 | 0.9 | 18 | 1 | US-08-951-923-51 |
| 31 | 16.4 | 0.9 | 19 | 1 | US-09-696-791-348 |
| 32 | 16.2 | 0.9 | 21 | 1 | US-08-863-639A-48 |
| 33 | 16.2 | 0.9 | 21 | 1 | US-08-863-639A-76 |

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| 34 | 16.2 | 0.9 | 21 | 1 | US-09-726-774-65 |
| 35 | 16.2 | 0.9 | 23 | 1 | US-08-401-512-38 |
| 36 | 16.2 | 0.9 | 24 | 1 | US-09-544-398B-567 |
| 37 | 16 | 0.9 | 20 | 1 | US-08-746-559A-7 |
| 38 | 15.8 | 0.9 | 19 | 1 | US-09-696-791-760 |
| 39 | 15.8 | 0.9 | 19 | 1 | US-09-696-791-761 |
| 40 | 15.8 | 0.9 | 19 | 1 | US-09-696-791-762 |
| 41 | 15.8 | 0.9 | 19 | 1 | US-09-696-791-1893 |
| 42 | 15.8 | 0.9 | 20 | 1 | US-09-490-692-35 |
| 43 | 15.6 | 0.9 | 22 | 1 | US-09-322-352A-5 |
| 44 | 15.6 | 0.9 | 22 | 1 | 5164305-2 |
| 45 | 15.6 | 0.9 | 23 | 1 | US-08-244-269-35 |
| 46 | 15.6 | 0.9 | 23 | 1 | US-08-244-269-36 |
| 47 | 15.6 | 0.9 | 23 | 1 | US-08-468-551-9 |
| 48 | 15.6 | 0.9 | 24 | 1 | US-08-160-670A-49 |
| 49 | 15.4 | 0.9 | 17 | 1 | US-09-827-998-544 |
| 50 | 15.4 | 0.9 | 19 | 1 | US-08-776-900C-24 |
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| 52 | 15.4 | 0.9 | 19 | 1 | US-09-696-791-308 |
| 53 | 15.4 | 0.9 | 21 | 1 | US-08-846-020A-24 |
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| 55 | 15.4 | 0.9 | 21 | 1 | US-09-065-040-6 |
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| 57 | 15.4 | 0.9 | 23 | 1 | US-09-198-243-2 |
| 58 | 15.2 | 0.9 | 20 | 1 | US-08-009-263C-34 |
| 59 | 15.2 | 0.9 | 20 | 1 | US-09-357-072-81 |
| 60 | 15.2 | 0.9 | 20 | 1 | US-09-205-428-3 |
| 61 | 15.2 | 0.9 | 20 | 1 | US-09-286-504-29 |
| 62 | 15.2 | 0.9 | 20 | 1 | US-08-838-715B-34 |
| 63 | 15.2 | 0.9 | 20 | 1 | US-08-838-715B-89 |
| 64 | 15.2 | 0.9 | 20 | 1 | US-09-359-756-8 |
| 65 | 15.2 | 0.9 | 20 | 1 | US-08-679-645-1259 |
| 66 | 15.2 | 0.9 | 20 | 1 | US-09-580-189-14 |
| 67 | 15.2 | 0.9 | 20 | 1 | US-09-702-327-54 |
| 68 | 15.2 | 0.9 | 20 | 1 | US-09-792-594-83 |
| 69 | 15.2 | 0.9 | 20 | 1 | US-09-676-610B-172 |
| 70 | 15.2 | 0.9 | 20 | 1 | US-09-640-101-29 |
| 71 | 15.2 | 0.9 | 20 | 1 | US-09-860-473-163 |
| 72 | 15.2 | 0.9 | 20 | 1 | US-09-133-352B-11 |
| 73 | 15.2 | 0.9 | 21 | 1 | US-08-009-263C-22 |
| 74 | 15.2 | 0.9 | 21 | 1 | US-08-009-263C-88 |
| 75 | 15.2 | 0.9 | 21 | 1 | US-08-468-447-7 |
| 76 | 15.2 | 0.9 | 21 | 1 | US-08-469-851A-7 |
| 77 | 15.2 | 0.9 | 21 | 1 | US-07-927-506-22 |
| 78 | 15.2 | 0.9 | 21 | 1 | US-08-233-711-1 |
| 79 | 15.2 | 0.9 | 21 | 1 | US-08-467-597A-7 |
| 80 | 15.2 | 0.9 | 21 | 1 | US-08-468-569A-7 |
| 81 | 15.2 | 0.9 | 21 | 1 | US-08-113-993A-1 |
| 82 | 15.2 | 0.9 | 21 | 1 | US-08-466-692A-7 |
| 83 | 15.2 | 0.9 | 21 | 1 | US-08-471-966A-7 |
| 84 | 15.2 | 0.9 | 21 | 1 | US-08-784-498-1 |
| 85 | 15.2 | 0.9 | 21 | 1 | US-08-451-777A-10 |
| 86 | 15.2 | 0.9 | 21 | 1 | US-08-249-386A-24 |
| 87 | 15.2 | 0.9 | 21 | 1 | US-08-451-778A-1 |
| 88 | 15.2 | 0.9 | 21 | 1 | US-08-468-037A-18 |
| 89 | 15.2 | 0.9 | 21 | 1 | US-08-468-037A-19 |
| 90 | 15.2 | 0.9 | 21 | 1 | US-08-471-973A-18 |
| 91 | 15.2 | 0.9 | 21 | 1 | US-08-471-973A-19 |
| 92 | 15.2 | 0.9 | 21 | 1 | US-08-998-208-10 |
| 93 | 15.2 | 0.9 | 21 | 1 | US-08-465-880-23 |
| 94 | 15.2 | 0.9 | 21 | 1 | US-08-465-880-24 |
| 95 | 15.2 | 0.9 | 21 | 1 | US-08-863-639A-36 |
| 96 | 15.2 | 0.9 | 21 | 1 | US-08-863-639A-50 |
| 97 | 15.2 | 0.9 | 21 | 1 | US-08-863-639A-73 |
| 98 | 15.2 | 0.9 | 21 | 1 | US-08-863-639A-88 |
| 99 | 15.2 | 0.9 | 21 | 1 | US-09-035-357-18 |
| 100 | 15.2 | 0.9 | 21 | 1 | US-09-035-357-19 |
| 101 | 15.2 | 0.9 | 21 | 1 | US-08-951-923-26 |
| 102 | 15.2 | 0.9 | 21 | 1 | US-08-950-779-3 |
| 103 | 15.2 | 0.9 | 21 | 1 | US-08-950-779-7 |
| 104 | 15.2 | 0.9 | 21 | 1 | US-08-838-715B-22 |
| 105 | 15.2 | 0.9 | 21 | 1 | US-08-838-715B-88 |
| 106 | 15.2 | 0.9 | 21 | 1 | US-09-414-145-3 |

Sequence 65, Appl
Sequence 38, Appl
Sequence 567, App
Sequence 7, Appli
Sequence 760, App
Sequence 761, App
Sequence 762, App
Sequence 1893, Ap
Sequence 35, Appli
Sequence 5, Appli
Patent No. 516430
Sequence 35, Appl
Sequence 36, Appl
Sequence 9, Appli
Sequence 49, Appl
Sequence 544, App
Sequence 24, Appl
Sequence 24, Appl
Sequence 308, App
Sequence 24, Appl
Sequence 6, Appli
Sequence 2081, Ap
Sequence 2, Appli
Sequence 34, Appl
Sequence 81, Appl
Sequence 3, Appli
Sequence 29, Appl
Sequence 34, Appl
Sequence 89, Appl
Sequence 8, Appli
Sequence 1259, Ap
Sequence 14, Appl
Sequence 54, Appl
Sequence 83, Appl
Sequence 172, App
Sequence 29, Appl
Sequence 163, App
Sequence 11, Appl
Sequence 22, Appl
Sequence 88, Appl
Sequence 7, Appli
Sequence 7, Appli
Sequence 22, Appl
Sequence 1, Appli
Sequence 7, Appli
Sequence 7, Appli
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Sequence 7, Appli
Sequence 1, Appli
Sequence 10, Appl
Sequence 24, Appl
Sequence 10, Appl
Sequence 18, Appl
Sequence 19, Appl
Sequence 18, Appl
Sequence 23, Appl
Sequence 24, Appl
Sequence 36, Appl
Sequence 50, Appl
Sequence 73, Appl
Sequence 88, Appl
Sequence 18, Appl
Sequence 19, Appl
Sequence 26, Appl
Sequence 3, Appli
Sequence 7, Appli
Sequence 22, Appl
Sequence 88, Appl
Sequence 3, Appli

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|---------------------|---------------------|-------|------|-----|----|---|---------------------|----------------------|
| c 107 | 15.2 | 0.9 | 21 | 1 | US-09-177-953-3 | Sequence 3, Appl | 180 | 14.8 | 0.8 | 21 | 1 | US-09-377-497-35 | Sequence 35, Appl |
| c 108 | 15.2 | 0.9 | 21 | 1 | US-09-177-953-12 | Sequence 12, Appl | 181 | 14.8 | 0.8 | 21 | 1 | US-09-657-472-7 | Sequence 7, Appl |
| c 109 | 15.2 | 0.9 | 21 | 1 | US-09-177-953-26 | Sequence 26, Appl | 182 | 14.8 | 0.8 | 21 | 1 | US-09-657-472-136 | Sequence 136, Appl |
| c 110 | 15.2 | 0.9 | 21 | 1 | US-09-177-953-34 | Sequence 34, Appl | 183 | 14.8 | 0.8 | 21 | 1 | US-09-657-472-2259 | Sequence 2259, Appl |
| c 111 | 15.2 | 0.9 | 21 | 1 | US-09-177-953-41 | Sequence 41, Appl | c 184 | 14.8 | 0.8 | 22 | 1 | US-08-802-468-10 | Sequence 10, Appl |
| c 112 | 15.2 | 0.9 | 21 | 1 | US-09-111-678-3 | Sequence 3, Appl | 185 | 14.8 | 0.8 | 22 | 1 | US-09-033-936-6 | Sequence 6, Appl |
| c 113 | 15.2 | 0.9 | 21 | 1 | US-08-829-637A-128 | Sequence 128, Appl | 186 | 14.8 | 0.8 | 22 | 1 | US-09-657-013-12 | Sequence 12, Appl |
| c 114 | 15.2 | 0.9 | 21 | 1 | US-09-287-175-3 | Sequence 3, Appl | 187 | 14.8 | 0.8 | 22 | 1 | US-09-657-013-84 | Sequence 84, Appl |
| c 115 | 15.2 | 0.9 | 21 | 1 | US-09-287-175-6 | Sequence 6, Appl | 188 | 14.6 | 0.8 | 21 | 1 | US-08-557-139-9 | Sequence 9, Appl |
| c 116 | 15.2 | 0.9 | 21 | 1 | US-09-135-202-18 | Sequence 18, Appl | 189 | 14.6 | 0.8 | 21 | 1 | US-08-863-639A-52 | Sequence 52, Appl |
| c 117 | 15.2 | 0.9 | 21 | 1 | US-09-135-203-19 | Sequence 19, Appl | c 190 | 14.6 | 0.8 | 21 | 1 | US-08-863-639A-56 | Sequence 56, Appl |
| c 118 | 15.2 | 0.9 | 21 | 1 | US-09-349-659-3 | Sequence 3, Appl | c 191 | 14.6 | 0.8 | 21 | 1 | US-08-840-316-29 | Sequence 29, Appl |
| c 119 | 15.2 | 0.9 | 21 | 1 | US-08-802-331-23 | Sequence 23, Appl | c 192 | 14.6 | 0.8 | 21 | 1 | US-08-809-523-29 | Sequence 29, Appl |
| c 120 | 15.2 | 0.9 | 21 | 1 | US-08-802-331-24 | Sequence 24, Appl | c 193 | 14.6 | 0.8 | 21 | 1 | US-09-109-663-37 | Sequence 37, Appl |
| c 121 | 15.2 | 0.9 | 21 | 1 | US-09-389-283-18 | Sequence 18, Appl | c 194 | 14.6 | 0.8 | 21 | 1 | US-08-471-971-29 | Sequence 29, Appl |
| c 122 | 15.2 | 0.9 | 21 | 1 | US-09-389-283-19 | Sequence 19, Appl | 195 | 14.6 | 0.8 | 21 | 1 | US-08-679-493A-134 | Sequence 134, Appl |
| c 123 | 15.2 | 0.9 | 21 | 1 | US-09-174-186-4 | Sequence 4, Appl | 196 | 14.6 | 0.8 | 21 | 1 | US-08-679-493A-136 | Sequence 136, Appl |
| c 124 | 15.2 | 0.9 | 21 | 1 | US-09-306-278A-3 | Sequence 3, Appl | 197 | 14.6 | 0.8 | 21 | 1 | US-08-679-493A-137 | Sequence 137, Appl |
| c 125 | 15.2 | 0.9 | 21 | 1 | US-10-318-628-3 | Sequence 3, Appl | 198 | 14.6 | 0.8 | 21 | 1 | US-08-679-493A-138 | Sequence 138, Appl |
| c 126 | 15.2 | 0.9 | 21 | 1 | US-10-318-628-12 | Sequence 12, Appl | 199 | 14.6 | 0.8 | 21 | 1 | US-08-679-493A-144 | Sequence 144, Appl |
| c 127 | 15.2 | 0.9 | 21 | 1 | US-10-318-628-26 | Sequence 26, Appl | c 200 | 14.6 | 0.8 | 21 | 1 | US-09-844-634-4 | Sequence 4, Appl |
| c 128 | 15.2 | 0.9 | 21 | 1 | US-10-318-628-34 | Sequence 34, Appl | c 201 | 14.6 | 0.8 | 21 | 1 | US-09-408-776-29 | Sequence 29, Appl |
| c 129 | 15.2 | 0.9 | 21 | 1 | US-10-318-628-41 | Sequence 41, Appl | c 202 | 14.6 | 0.8 | 21 | 1 | US-09-422-978-7806 | Sequence 7806, Appl |
| c 130 | 15.2 | 0.9 | 21 | 1 | US-10-290-587-3 | Sequence 3, Appl | c 203 | 14.6 | 0.8 | 21 | 1 | US-09-422-978-10136 | Sequence 10136, Appl |
| c 131 | 15.2 | 0.9 | 21 | 1 | US-09-754-066-13 | Sequence 13, Appl | c 204 | 14.6 | 0.8 | 21 | 1 | US-09-589-460-4 | Sequence 4, Appl |
| c 132 | 15.2 | 0.9 | 21 | 1 | US-09-657-472-1386 | Sequence 186, Appl | c 205 | 14.6 | 0.8 | 21 | 1 | US-08-470-246-29 | Sequence 29, Appl |
| c 133 | 15.2 | 0.9 | 21 | 1 | US-10-029-598-48 | Sequence 48, Appl | c 206 | 14.6 | 0.8 | 21 | 1 | US-08-482-934A-25 | Sequence 25, Appl |
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| c 136 | 15.2 | 0.9 | 21 | 1 | PCT-US91-05815-22 | Sequence 22, Appl | c 209 | 14.6 | 0.8 | 21 | 1 | US-09-657-472-1825 | Sequence 1825, Appl |
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| c 138 | 15.2 | 0.9 | 21 | 1 | PCT-US95-06160-24 | Sequence 24, Appl | c 211 | 14.6 | 0.8 | 21 | 1 | US-10-006-611-7 | Sequence 7, Appl |
| c 139 | 15.2 | 0.9 | 21 | 1 | PCT-US95-06743-10 | Sequence 10, Appl | c 212 | 14.6 | 0.8 | 21 | 1 | PCT-US93-08849A-29 | Sequence 29, Appl |
| c 140 | 15.2 | 0.9 | 21 | 1 | PCT-US96-08757A-7 | Sequence 7, Appl | c 213 | 14.6 | 0.8 | 21 | 1 | PCT-US93-08849-29 | Sequence 29, Appl |
| c 141 | 15.2 | 0.9 | 22 | 1 | US-08-232-081B-10 | Sequence 10, Appl | c 214 | 14.6 | 0.8 | 22 | 1 | US-08-881-450A-9 | Sequence 9, Appl |
| c 142 | 15.2 | 0.9 | 22 | 1 | US-09-755-665-68 | Sequence 68, Appl | c 215 | 14.6 | 0.8 | 22 | 1 | US-09-792-024-368 | Sequence 368, Appl |
| c 143 | 15.2 | 0.9 | 22 | 1 | US-09-546-596A-19 | Sequence 19, Appl | c 216 | 14.4 | 0.8 | 17 | 1 | US-08-055-917-5 | Sequence 5, Appl |
| c 144 | 15.2 | 0.9 | 22 | 1 | US-08-117-363A-19 | Sequence 19, Appl | c 217 | 14.4 | 0.8 | 17 | 1 | US-08-095-068-5 | Sequence 5, Appl |
| c 145 | 15.2 | 0.9 | 23 | 1 | US-08-068-945A-25 | Sequence 25, Appl | c 218 | 14.4 | 0.8 | 17 | 1 | US-08-140-721A-5 | Sequence 5, Appl |
| c 146 | 15.2 | 0.9 | 23 | 1 | US-08-442-808-25 | Sequence 25, Appl | c 219 | 14.4 | 0.8 | 17 | 1 | US-08-619-790C-5 | Sequence 5, Appl |
| c 147 | 15.2 | 0.9 | 23 | 1 | US-08-653-740-18 | Sequence 18, Appl | c 220 | 14.4 | 0.8 | 17 | 1 | US-08-758-366-427 | Sequence 427, Appl |
| c 148 | 15.2 | 0.9 | 23 | 1 | US-08-463-090B-18 | Sequence 18, Appl | c 221 | 14.4 | 0.8 | 17 | 1 | US-07-785-565A-5 | Sequence 5, Appl |
| c 149 | 15.2 | 0.9 | 23 | 1 | US-09-073-594-18 | Sequence 18, Appl | c 222 | 14.4 | 0.8 | 17 | 1 | US-09-436-605-8 | Sequence 8, Appl |
| c 150 | 15.2 | 0.9 | 23 | 1 | US-09-275-925-18 | Sequence 18, Appl | c 223 | 14.4 | 0.8 | 17 | 1 | US-09-474-432B-505 | Sequence 505, Appl |
| c 151 | 15.2 | 0.9 | 23 | 1 | US-09-647-344A-3 | Sequence 3, Appl | c 224 | 14.4 | 0.8 | 17 | 1 | US-09-371-772B-6740 | Sequence 6740, Appl |
| c 152 | 15 | 0.9 | 23 | 1 | US-09-256-496-10 | Sequence 10, Appl | c 225 | 14.4 | 0.8 | 17 | 1 | US-09-476-387-504 | Sequence 504, Appl |
| c 153 | 15 | 0.9 | 19 | 1 | US-09-696-791-204 | Sequence 204, Appl | c 226 | 14.4 | 0.8 | 17 | 1 | US-09-827-998-543 | Sequence 543, Appl |
| c 154 | 15 | 0.9 | 20 | 1 | US-08-621-841-50 | Sequence 50, Appl | c 227 | 14.4 | 0.8 | 17 | 1 | US-09-827-998-545 | Sequence 545, Appl |
| c 155 | 15 | 0.9 | 20 | 1 | US-07-711-303-7 | Sequence 7, Appl | c 228 | 14.4 | 0.8 | 18 | 1 | US-09-205-144-19 | Sequence 19, Appl |
| c 156 | 15 | 0.9 | 21 | 1 | US-08-410-654B-29 | Sequence 29, Appl | c 229 | 14.4 | 0.8 | 18 | 1 | US-09-723-534-16 | Sequence 16, Appl |
| c 157 | 15 | 0.9 | 21 | 1 | US-08-474-851-29 | Sequence 29, Appl | c 230 | 14.4 | 0.8 | 18 | 1 | US-09-422-978-5066 | Sequence 5066, Appl |
| c 158 | 15 | 0.9 | 21 | 1 | US-08-481-560-29 | Sequence 29, Appl | c 231 | 14.4 | 0.8 | 19 | 1 | US-08-640-672-6 | Sequence 6, Appl |
| c 159 | 15 | 0.9 | 21 | 1 | US-09-657-472-1729 | Sequence 1729, Appl | c 232 | 14.4 | 0.8 | 19 | 1 | US-08-684-498A-6 | Sequence 6, Appl |
| c 160 | 15 | 0.9 | 23 | 1 | US-08-244-116B-39 | Sequence 39, Appl | c 233 | 14.4 | 0.8 | 19 | 1 | US-08-577-858A-6 | Sequence 6, Appl |
| c 161 | 15 | 0.9 | 23 | 1 | US-09-150-900-42 | Sequence 42, Appl | c 234 | 14.4 | 0.8 | 19 | 1 | US-08-846-020A-36 | Sequence 36, Appl |
| c 162 | 15 | 0.9 | 23 | 1 | US-09-449-218D-21 | Sequence 21, Appl | c 235 | 14.4 | 0.8 | 19 | 1 | US-09-177-953-9 | Sequence 9, Appl |
| c 163 | 15 | 0.9 | 23 | 1 | US-09-668-529A-21 | Sequence 21, Appl | c 236 | 14.4 | 0.8 | 19 | 1 | US-09-617-871-36 | Sequence 36, Appl |
| c 164 | 15 | 0.9 | 23 | 1 | US-09-668-037A-21 | Sequence 21, Appl | c 237 | 14.4 | 0.8 | 19 | 1 | US-10-318-628-9 | Sequence 9, Appl |
| c 165 | 15 | 0.9 | 23 | 1 | US-09-761-962A-43 | Sequence 43, Appl | c 238 | 14.4 | 0.8 | 19 | 1 | US-09-696-791-344 | Sequence 344, Appl |
| c 166 | 14.8 | 0.8 | 18 | 1 | US-09-920-760-24 | Sequence 24, Appl | c 239 | 14.4 | 0.8 | 20 | 1 | US-07-940-242A-40 | Sequence 40, Appl |
| c 167 | 14.8 | 0.8 | 18 | 1 | US-09-422-978-11527 | Sequence 11527, A | c 240 | 14.4 | 0.8 | 20 | 1 | US-07-932-379A-6 | Sequence 6, Appl |
| c 168 | 14.8 | 0.8 | 18 | 1 | US-09-696-791-4270 | Sequence 4270, Appl | c 241 | 14.4 | 0.8 | 20 | 1 | US-08-379-295-6 | Sequence 6, Appl |
| c 169 | 14.8 | 0.8 | 18 | 1 | US-09-696-791-4271 | Sequence 4271, Appl | c 242 | 14.4 | 0.8 | 20 | 1 | US-08-379-296-6 | Sequence 6, Appl |
| c 170 | 14.8 | 0.8 | 18 | 1 | US-09-696-791-4272 | Sequence 4272, Appl | c 243 | 14.4 | 0.8 | 20 | 1 | US-08-665-259-70 | Sequence 70, Appl |
| c 171 | 14.8 | 0.8 | 19 | 1 | US-09-696-791-205 | Sequence 205, Appl | c 244 | 14.4 | 0.8 | 20 | 1 | US-08-763-500-70 | Sequence 70, Appl |
| c 172 | 14.8 | 0.8 | 19 | 1 | US-09-696-791-585 | Sequence 585, Appl | c 245 | 14.4 | 0.8 | 20 | 1 | US-09-444-053-77 | Sequence 77, Appl |
| c 173 | 14.8 | 0.8 | 19 | 1 | US-09-696-791-1852 | Sequence 1852, Appl | c 246 | 14.4 | 0.8 | 20 | 1 | US-09-513-729B-14 | Sequence 14, Appl |
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| c 175 | 14.8 | 0.8 | 20 | 1 | US-09-288-461-27 | Sequence 27, Appl | c 248 | 14.4 | 0.8 | 20 | 1 | US-09-898-361-105 | Sequence 105, Appl |
| c 176 | 14.8 | 0.8 | 20 | 1 | US-08-927-219-72 | Sequence 72, Appl | c 249 | 14.4 | 0.8 | 20 | 1 | US-09-033-936-8 | Sequence 8, Appl |
| c 177 | 14.8 | 0.8 | 20 | 1 | US-08-643-212-35 | Sequence 35, Appl | c 250 | 14.4 | 0.8 | 21 | 1 | US-09-657-472-2176 | Sequence 2176, Appl |
| c 178 | 14.8 | 0.8 | 20 | 1 | US-09-700-422-6 | Sequence 6, Appl | c 251 | 14.4 | 0.8 | 21 | 1 | US-09-593-344-4 | Sequence 4, Appl |
| c 179 | 14.8 | 0.8 | 20 | 1 | US-09-758-881-27 | Sequence 27, Appl | c 252 | 14.4 | 0.8 | 21 | 1 | US-09-380-836-58 | Sequence 58, Appl |

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| 253 | 14.4 | 0.8 | 22 | 1 | US-08-437-027-7 | Sequence 7, Appli | 326 | 14.2 | 0.8 | 20 | 1 | US-09-269-136B-4 | Sequence 4, Appli |
| 254 | 14.4 | 0.8 | 22 | 1 | US-08-667-079B-20 | Sequence 20, Appl | c 327 | 14.2 | 0.8 | 20 | 1 | US-08-903-446A-14 | Sequence 14, Appl |
| 255 | 14.2 | 0.8 | 19 | 1 | US-08-009-263C-28 | Sequence 28, Appl | 328 | 14.2 | 0.8 | 20 | 1 | US-09-104-382-7 | Sequence 7, Appl |
| 256 | 14.2 | 0.8 | 19 | 1 | US-08-009-263C-35 | Sequence 35, Appl | c 329 | 14.2 | 0.8 | 20 | 1 | US-09-428-583-68 | Sequence 68, Appl |
| 257 | 14.2 | 0.8 | 19 | 1 | US-08-605-089-3 | Sequence 3, Appli | c 330 | 14.2 | 0.8 | 20 | 1 | US-09-364-416-99 | Sequence 99, Appl |
| 258 | 14.2 | 0.8 | 19 | 1 | US-08-332-766A-56 | Sequence 56, Appl | c 331 | 14.2 | 0.8 | 20 | 1 | US-09-026-601-2 | Sequence 2, Appli |
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| 260 | 14.2 | 0.8 | 19 | 1 | US-08-838-715B-35 | Sequence 35, Appl | 333 | 14.2 | 0.8 | 20 | 1 | US-09-407-705C-1 | Sequence 1, Appli |
| 261 | 14.2 | 0.8 | 19 | 1 | US-08-487-792-51 | Sequence 51, Appl | 334 | 14.2 | 0.8 | 20 | 1 | US-09-702-327-66 | Sequence 66, Appl |
| 262 | 14.2 | 0.8 | 19 | 1 | US-09-908-594-31 | Sequence 51, Appl | 335 | 14.2 | 0.8 | 20 | 1 | US-09-658-679A-50 | Sequence 50, Appl |
| 263 | 14.2 | 0.8 | 19 | 1 | US-08-921-497-1 | Sequence 1, Appli | 336 | 14.2 | 0.8 | 20 | 1 | US-09-481-293-2 | Sequence 2, Appli |
| 264 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-216 | Sequence 216, App | c 337 | 14.2 | 0.8 | 20 | 1 | US-09-481-293-3 | Sequence 3, Appli |
| 265 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-217 | Sequence 217, App | c 338 | 14.2 | 0.8 | 20 | 1 | US-09-733-294A-89 | Sequence 89, Appl |
| 266 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-248 | Sequence 248, App | 339 | 14.2 | 0.8 | 20 | 1 | US-09-422-978-6583 | Sequence 6583, Ap |
| 267 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-249 | Sequence 249, App | 340 | 14.2 | 0.8 | 20 | 1 | US-09-705-267A-113 | Sequence 113, App |
| 268 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-250 | Sequence 250, App | c 341 | 14.2 | 0.8 | 20 | 1 | US-09-198-452A-5779 | Sequence 5779, Ap |
| 269 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-352 | Sequence 352, App | 342 | 14.2 | 0.8 | 20 | 1 | US-09-833-555-7 | Sequence 7, Appli |
| 270 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-481 | Sequence 481, App | c 343 | 14.2 | 0.8 | 20 | 1 | US-09-503-653A-24 | Sequence 24, Appl |
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| 273 | 14.2 | 0.8 | 19 | 1 | US-09-696-791-676 | Sequence 676, App | c 346 | 14.2 | 0.8 | 20 | 1 | US-09-939-379B-3 | Sequence 3, Appli |
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| 282 | 14.2 | 0.8 | 20 | 1 | US-08-009-263C-30 | Sequence 30, Appl | 355 | 14.2 | 0.8 | 21 | 1 | US-08-323-192D-1 | Sequence 1, Appli |
| 283 | 14.2 | 0.8 | 20 | 1 | US-08-222-177A-339 | Sequence 339, App | 356 | 14.2 | 0.8 | 21 | 1 | US-08-435-628-54 | Sequence 54, Appl |
| 284 | 14.2 | 0.8 | 20 | 1 | US-08-233-608-39 | Sequence 39, Appl | 357 | 14.2 | 0.8 | 21 | 1 | US-08-470-887A-1 | Sequence 1, Appli |
| 285 | 14.2 | 0.8 | 20 | 1 | US-08-233-608-40 | Sequence 40, Appl | c 358 | 14.2 | 0.8 | 21 | 1 | US-08-718-596-1 | Sequence 1, Appli |
| 286 | 14.2 | 0.8 | 20 | 1 | US-08-429-523-2 | Sequence 2, Appli | 359 | 14.2 | 0.8 | 21 | 1 | US-08-252-508B-1 | Sequence 1, Appli |
| 287 | 14.2 | 0.8 | 20 | 1 | US-08-429-523-4 | Sequence 4, Appli | 360 | 14.2 | 0.8 | 21 | 1 | US-08-627-695-1 | Sequence 1, Appli |
| 288 | 14.2 | 0.8 | 20 | 1 | US-08-429-532-2 | Sequence 2, Appli | 361 | 14.2 | 0.8 | 21 | 1 | US-09-106-377-1 | Sequence 1, Appli |
| 289 | 14.2 | 0.8 | 20 | 1 | US-08-429-532-4 | Sequence 4, Appli | 362 | 14.2 | 0.8 | 21 | 1 | US-09-344-520-3 | Sequence 3, Appli |
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| 291 | 14.2 | 0.8 | 20 | 1 | US-08-429-522-4 | Sequence 4, Appli | c 364 | 14.2 | 0.8 | 21 | 1 | US-09-328-174A-108 | Sequence 108, App |
| 292 | 14.2 | 0.8 | 20 | 1 | US-08-429-520-2 | Sequence 2, Appli | c 365 | 14.2 | 0.8 | 21 | 1 | US-09-506-855-41 | Sequence 41, Appl |
| 293 | 14.2 | 0.8 | 20 | 1 | US-08-429-520-4 | Sequence 4, Appli | 366 | 14.2 | 0.8 | 21 | 1 | US-09-636-382A-5 | Sequence 5, Appli |
| 294 | 14.2 | 0.8 | 20 | 1 | US-08-531-556-102 | Sequence 102, App | c 367 | 14.2 | 0.8 | 21 | 1 | US-09-911-176B-41 | Sequence 41, Appl |
| 295 | 14.2 | 0.8 | 20 | 1 | US-08-742-023-10 | Sequence 10, Appl | c 368 | 14.2 | 0.8 | 21 | 1 | US-09-422-978-8100 | Sequence 8100, Ap |
| 296 | 14.2 | 0.8 | 20 | 1 | US-08-742-023-11 | Sequence 11, Appl | c 369 | 14.2 | 0.8 | 21 | 1 | US-09-619-740-41 | Sequence 41, Appl |
| 297 | 14.2 | 0.8 | 20 | 1 | US-08-887-480-39 | Sequence 39, Appl | c 370 | 14.2 | 0.8 | 21 | 1 | US-09-506-852-41 | Sequence 41, Appl |
| 298 | 14.2 | 0.8 | 20 | 1 | US-08-887-480-40 | Sequence 40, Appl | c 371 | 14.2 | 0.8 | 21 | 1 | US-09-032-438C-72 | Sequence 72, Appl |
| 299 | 14.2 | 0.8 | 20 | 1 | US-08-905-314A-2 | Sequence 2, Appli | c 372 | 14.2 | 0.8 | 21 | 1 | US-09-657-472-824 | Sequence 824, App |
| 300 | 14.2 | 0.8 | 20 | 1 | US-08-905-314A-3 | Sequence 3, Appli | 373 | 14.2 | 0.8 | 21 | 1 | US-09-657-472-1083 | Sequence 1083, Ap |
| 301 | 14.2 | 0.8 | 20 | 1 | US-08-267-803B-79 | Sequence 79, Appl | 374 | 14.2 | 0.8 | 21 | 1 | US-09-657-472-1320 | Sequence 1320, Ap |
| 302 | 14.2 | 0.8 | 20 | 1 | US-08-753-979A-32 | Sequence 32, Appli | 375 | 14.2 | 0.8 | 21 | 1 | US-09-657-472-1580 | Sequence 1580, Ap |
| 303 | 14.2 | 0.8 | 20 | 1 | US-08-709-874A-7 | Sequence 7, Appli | c 376 | 14.2 | 0.8 | 21 | 1 | US-09-657-472-1580 | Sequence 1580, Ap |
| 304 | 14.2 | 0.8 | 20 | 1 | US-08-704-207-2 | Sequence 2, Appli | 377 | 14.2 | 0.8 | 21 | 1 | Patent No. 5166057 | Sequence 319, App |
| 305 | 14.2 | 0.8 | 20 | 1 | US-08-879-260-7 | Sequence 7, Appli | 378 | 14 | 0.8 | 15 | 1 | US-08-291-932A-319 | Sequence 319, App |
| 306 | 14.2 | 0.8 | 20 | 1 | US-08-726-012B-14 | Sequence 14, Appl | c 379 | 14 | 0.8 | 17 | 1 | US-08-985-162-277 | Sequence 277, App |
| 307 | 14.2 | 0.8 | 20 | 1 | US-08-722-187-39 | Sequence 39, Appl | c 380 | 14 | 0.8 | 17 | 1 | US-08-985-162-278 | Sequence 278, App |
| 308 | 14.2 | 0.8 | 20 | 1 | US-08-722-187-40 | Sequence 40, Appl | 381 | 14 | 0.8 | 17 | 1 | US-08-584-040-4187 | Sequence 4187, Ap |
| 309 | 14.2 | 0.8 | 20 | 1 | US-08-837-201C-99 | Sequence 99, Appl | 382 | 14 | 0.8 | 17 | 1 | US-08-584-040-7661 | Sequence 7661, Ap |
| 310 | 14.2 | 0.8 | 20 | 1 | US-08-822-028-24 | Sequence 24, Appl | 383 | 14 | 0.8 | 17 | 1 | US-08-584-040-7677 | Sequence 7677, Ap |
| 311 | 14.2 | 0.8 | 20 | 1 | US-08-822-028-44 | Sequence 44, Appl | 384 | 14 | 0.8 | 17 | 1 | US-08-584-040-7678 | Sequence 7678, Ap |
| 312 | 14.2 | 0.8 | 20 | 1 | US-08-707-399E-6 | Sequence 6, Appli | 385 | 14 | 0.8 | 17 | 1 | US-09-371-772B-1954 | Sequence 1954, Ap |
| 313 | 14.2 | 0.8 | 20 | 1 | US-09-357-070-29 | Sequence 29, Appl | 386 | 14 | 0.8 | 17 | 1 | US-09-371-772B-3450 | Sequence 3450, Ap |
| 314 | 14.2 | 0.8 | 20 | 1 | US-08-968-505-10 | Sequence 10, Appl | 387 | 14 | 0.8 | 17 | 1 | US-09-371-772B-3462 | Sequence 3462, Ap |
| 315 | 14.2 | 0.8 | 20 | 1 | US-08-968-505-11 | Sequence 11, Appl | 388 | 14 | 0.8 | 17 | 1 | US-09-371-772B-3463 | Sequence 3463, Ap |
| 316 | 14.2 | 0.8 | 20 | 1 | US-09-287-796-121 | Sequence 121, App | 389 | 14 | 0.8 | 17 | 1 | US-09-371-772B-6817 | Sequence 6817, Ap |
| 317 | 14.2 | 0.8 | 20 | 1 | US-08-838-715B-30 | Sequence 30, Appl | 390 | 14 | 0.8 | 17 | 1 | US-09-371-772B-6818 | Sequence 6818, Ap |
| 318 | 14.2 | 0.8 | 20 | 1 | US-08-838-715B-90 | Sequence 90, Appl | c 391 | 14 | 0.8 | 17 | 1 | US-09-401-063-277 | Sequence 277, App |
| 319 | 14.2 | 0.8 | 20 | 1 | US-09-087-194-18 | Sequence 18, Appl | c 392 | 14 | 0.8 | 17 | 1 | US-09-401-063-278 | Sequence 278, App |
| 320 | 14.2 | 0.8 | 20 | 1 | US-08-479-285-24 | Sequence 24, Appl | 393 | 14 | 0.8 | 17 | 1 | US-09-827-998-541 | Sequence 541, App |
| 321 | 14.2 | 0.8 | 20 | 1 | US-08-479-285-44 | Sequence 44, Appl | 394 | 14 | 0.8 | 17 | 1 | US-09-827-998-542 | Sequence 542, App |
| 322 | 14.2 | 0.8 | 20 | 1 | US-09-258-967-2 | Sequence 2, Appli | 395 | 14 | 0.8 | 18 | 1 | US-09-213-767-9 | Sequence 9, Appli |
| 323 | 14.2 | 0.8 | 20 | 1 | US-09-258-967-3 | Sequence 3, Appli | 396 | 14 | 0.8 | 18 | 1 | US-08-584-040-4492 | Sequence 4492, Ap |
| 324 | 14.2 | 0.8 | 20 | 1 | US-09-130-616-121 | Sequence 121, App | 397 | 14 | 0.8 | 18 | 1 | US-09-371-772B-2205 | Sequence 2205, Ap |
| 325 | 14.2 | 0.8 | 20 | 1 | US-09-269-136B-2 | Sequence 2, Appli | 398 | 14 | 0.8 | 19 | 1 | US-09-696-791-203 | Sequence 203, App |

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|----------------------|-------------------|-------|------|-----|----|---|---------------------|-------------------|
| c 399 | 14 | 0.8 | 20 | 1 | US-09-953-318-143 | Sequence 143, App | c 472 | 13.8 | 0.8 | 20 | 1 | US-09-344-001-33 | Sequence 33, Appl |
| c 400 | 14 | 0.8 | 20 | 1 | US-09-574-779B-14 | Sequence 14, Appl | c 473 | 13.8 | 0.8 | 20 | 1 | US-08-810-641-3 | Sequence 3, Appl |
| c 401 | 14 | 0.8 | 20 | 1 | US-09-574-779B-25 | Sequence 25, Appl | c 474 | 13.8 | 0.8 | 20 | 1 | US-08-970-725-10 | Sequence 10, Appl |
| c 402 | 14 | 0.8 | 20 | 1 | US-09-899-440-3 | Sequence 3, Appl | c 475 | 13.8 | 0.8 | 20 | 1 | US-09-092-077-11 | Sequence 11, Appl |
| c 403 | 14 | 0.8 | 21 | 1 | US-09-435-739-17 | Sequence 17, Appl | c 476 | 13.8 | 0.8 | 20 | 1 | US-09-092-077-13 | Sequence 13, Appl |
| c 404 | 14 | 0.8 | 21 | 1 | US-09-032-438C-24 | Sequence 24, Appl | c 477 | 13.8 | 0.8 | 20 | 1 | US-08-983-466-7 | Sequence 7, Appl |
| c 405 | 14 | 0.8 | 21 | 1 | US-09-657-472-1323 | Sequence 1323, Ap | c 478 | 13.8 | 0.8 | 20 | 1 | US-09-389-896-3 | Sequence 3, Appl |
| c 406 | 14 | 0.8 | 21 | 1 | US-09-657-472-1669 | Sequence 1669, Ap | c 479 | 13.8 | 0.8 | 20 | 1 | US-09-489-869-21 | Sequence 21, Appl |
| c 407 | 14 | 0.8 | 21 | 1 | US-09-988-113-17 | Sequence 17, Appl | c 480 | 13.8 | 0.8 | 20 | 1 | US-09-344-491A-1 | Sequence 1, Appl |
| c 408 | 13.8 | 0.8 | 17 | 1 | US-08-166-664-7 | Sequence 7, Appl | c 481 | 13.8 | 0.8 | 20 | 1 | US-09-344-491A-3 | Sequence 3, Appl |
| c 409 | 13.8 | 0.8 | 17 | 1 | US-08-373-124A-942 | Sequence 942, App | c 482 | 13.8 | 0.8 | 20 | 1 | US-09-364-416-9 | Sequence 9, Appl |
| c 410 | 13.8 | 0.8 | 17 | 1 | US-08-486-408-10 | Sequence 10, Appl | c 483 | 13.8 | 0.8 | 20 | 1 | US-08-367-841A-13 | Sequence 13, Appl |
| c 411 | 13.8 | 0.8 | 17 | 1 | US-08-435-628-942 | Sequence 942, App | c 484 | 13.8 | 0.8 | 20 | 1 | US-09-302-620B-47 | Sequence 47, Appl |
| c 412 | 13.8 | 0.8 | 17 | 1 | US-08-292-620A-1682 | Sequence 1682, Ap | c 485 | 13.8 | 0.8 | 20 | 1 | US-09-210-748A-12 | Sequence 12, Appl |
| c 413 | 13.8 | 0.8 | 17 | 1 | US-08-975-570-10 | Sequence 10, Appl | c 486 | 13.8 | 0.8 | 20 | 1 | US-09-702-251-77 | Sequence 77, Appl |
| c 414 | 13.8 | 0.8 | 17 | 1 | US-09-071-845-1682 | Sequence 1682, Ap | c 487 | 13.8 | 0.8 | 20 | 1 | US-09-702-246-66 | Sequence 66, Appl |
| c 415 | 13.8 | 0.8 | 17 | 1 | US-08-584-040-4222 | Sequence 4222, Ap | c 488 | 13.8 | 0.8 | 20 | 1 | US-09-506-073-83 | Sequence 83, Appl |
| c 416 | 13.8 | 0.8 | 17 | 1 | US-09-371-772B-1989 | Sequence 1989, Ap | c 489 | 13.8 | 0.8 | 20 | 1 | US-09-851-062-39 | Sequence 39, Appl |
| c 417 | 13.8 | 0.8 | 17 | 1 | US-09-827-998-575 | Sequence 575, App | c 490 | 13.8 | 0.8 | 20 | 1 | US-08-520-373D-9 | Sequence 9, Appl |
| c 418 | 13.8 | 0.8 | 17 | 1 | US-09-827-998-576 | Sequence 576, App | c 491 | 13.8 | 0.8 | 20 | 1 | US-09-898-361-71 | Sequence 71, Appl |
| c 419 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-1526 | Sequence 1526, Ap | c 492 | 13.8 | 0.8 | 20 | 1 | US-09-782-516A-1 | Sequence 1, Appl |
| c 420 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-6795 | Sequence 6795, Ap | c 493 | 13.8 | 0.8 | 20 | 1 | US-09-782-516A-3 | Sequence 3, Appl |
| c 421 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-6796 | Sequence 6796, Ap | c 494 | 13.8 | 0.8 | 20 | 1 | US-09-422-978-4109 | Sequence 4109, Ap |
| c 422 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-8045 | Sequence 8045, Ap | c 495 | 13.8 | 0.8 | 20 | 1 | US-09-060-299-357 | Sequence 357, App |
| c 423 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-8045 | Sequence 8045, A | c 496 | 13.8 | 0.8 | 20 | 1 | US-09-402-923A-357 | Sequence 357, App |
| c 424 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-10010 | Sequence 10010, A | c 497 | 13.8 | 0.8 | 20 | 1 | US-09-198-452A-1337 | Sequence 1337, Ap |
| c 425 | 13.8 | 0.8 | 17 | 1 | US-09-866-108A-10664 | Sequence 10664, A | c 498 | 13.8 | 0.8 | 20 | 1 | US-09-679-299A-119 | Sequence 119, App |
| c 426 | 13.8 | 0.8 | 18 | 1 | US-09-404-912-554 | Sequence 554, App | c 499 | 13.8 | 0.8 | 20 | 1 | US-09-377-497-21 | Sequence 21, Appl |
| c 427 | 13.8 | 0.8 | 18 | 1 | US-09-256-496-10 | Sequence 10, Appl | c 500 | 13.8 | 0.8 | 20 | 1 | US-09-493-714C-7 | Sequence 7, Appl |
| c 428 | 13.8 | 0.8 | 18 | 1 | US-08-009-263C-32 | Sequence 32, Appl | c 501 | 13.8 | 0.8 | 20 | 1 | US-09-939-581A-12 | Sequence 12, Appl |
| c 429 | 13.8 | 0.8 | 18 | 1 | US-09-205-922-40 | Sequence 40, Appl | c 502 | 13.8 | 0.8 | 20 | 1 | US-09-771-357-42 | Sequence 42, Appl |
| c 430 | 13.8 | 0.8 | 18 | 1 | US-09-197-008-19 | Sequence 19, Appl | c 503 | 13.8 | 0.8 | 20 | 1 | PCT-US95-02708-10 | Sequence 10, Appl |
| c 431 | 13.8 | 0.8 | 18 | 1 | US-08-956-242-10 | Sequence 10, Appl | c 504 | 13.8 | 0.8 | 20 | 1 | PCT-US95-07201-13 | Sequence 13, Appl |
| c 432 | 13.8 | 0.8 | 18 | 1 | US-09-256-496-9 | Sequence 9, Appl | c 505 | 13.8 | 0.8 | 21 | 1 | US-08-127-95A-15 | Sequence 15, Appl |
| c 433 | 13.8 | 0.8 | 18 | 1 | US-09-339-993-44 | Sequence 44, Appl | c 506 | 13.8 | 0.8 | 21 | 1 | US-08-474-542A-142 | Sequence 142, App |
| c 434 | 13.8 | 0.8 | 18 | 1 | US-09-351-215-10 | Sequence 10, Appl | c 507 | 13.8 | 0.8 | 21 | 1 | US-08-374-770-9 | Sequence 9, Appl |
| c 435 | 13.8 | 0.8 | 18 | 1 | US-09-289-466-52 | Sequence 52, Appl | c 508 | 13.8 | 0.8 | 21 | 1 | US-08-457-648-142 | Sequence 142, App |
| c 436 | 13.8 | 0.8 | 18 | 1 | US-08-838-715B-32 | Sequence 32, Appl | c 509 | 13.8 | 0.8 | 21 | 1 | US-08-461-593B-9 | Sequence 9, Appl |
| c 437 | 13.8 | 0.8 | 18 | 1 | US-09-025-701-3 | Sequence 3, Appl | c 510 | 13.8 | 0.8 | 21 | 1 | US-08-651-323A-9 | Sequence 9, Appl |
| c 438 | 13.8 | 0.8 | 18 | 1 | US-08-584-040-6244 | Sequence 6244, Ap | c 511 | 13.8 | 0.8 | 21 | 1 | US-08-875-573-10 | Sequence 10, Appl |
| c 439 | 13.8 | 0.8 | 18 | 1 | US-09-371-772B-3004 | Sequence 3004, Ap | c 512 | 13.8 | 0.8 | 21 | 1 | US-08-687-421-390 | Sequence 390, App |
| c 440 | 13.8 | 0.8 | 18 | 1 | US-09-640-198D-22 | Sequence 22, Appl | c 513 | 13.8 | 0.8 | 21 | 1 | US-09-046-894-15 | Sequence 15, Appl |
| c 441 | 13.8 | 0.8 | 18 | 1 | US-09-639-667-18 | Sequence 18, Appl | c 514 | 13.8 | 0.8 | 21 | 1 | US-08-679-493A-128 | Sequence 128, App |
| c 442 | 13.8 | 0.8 | 18 | 1 | US-09-747-391-127 | Sequence 127, App | c 515 | 13.8 | 0.8 | 21 | 1 | US-09-479-128-3 | Sequence 3, Appl |
| c 443 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-4273 | Sequence 4273, Ap | c 516 | 13.8 | 0.8 | 21 | 1 | US-09-616-761-1 | Sequence 1, Appl |
| c 444 | 13.8 | 0.8 | 19 | 1 | US-08-009-263C-31 | Sequence 31, Appl | c 517 | 13.8 | 0.8 | 21 | 1 | US-09-422-978-10380 | Sequence 10380, A |
| c 445 | 13.8 | 0.8 | 19 | 1 | US-08-400-580A-11 | Sequence 11, Appl | c 518 | 13.8 | 0.8 | 21 | 1 | US-09-422-978-11492 | Sequence 11492, A |
| c 446 | 13.8 | 0.8 | 19 | 1 | US-08-838-715B-31 | Sequence 31, Appl | c 519 | 13.8 | 0.8 | 21 | 1 | US-09-823-634A-1 | Sequence 1, Appl |
| c 447 | 13.8 | 0.8 | 19 | 1 | US-09-780-173A-5 | Sequence 5, Appl | c 520 | 13.8 | 0.8 | 21 | 1 | US-09-823-647B-1 | Sequence 1, Appl |
| c 448 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-225 | Sequence 225, App | c 521 | 13.8 | 0.8 | 21 | 1 | US-09-526-193A-171 | Sequence 171, App |
| c 449 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-315 | Sequence 315, App | c 522 | 13.8 | 0.8 | 21 | 1 | US-09-743-871B-21 | Sequence 21, Appl |
| c 450 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-334 | Sequence 334, App | c 523 | 13.8 | 0.8 | 21 | 1 | US-09-743-871B-25 | Sequence 25, Appl |
| c 451 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-335 | Sequence 335, App | c 524 | 13.8 | 0.8 | 21 | 1 | US-09-995-686-1 | Sequence 1, Appl |
| c 452 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-460 | Sequence 460, App | c 525 | 13.8 | 0.8 | 21 | 1 | US-09-657-472-77 | Sequence 77, Appl |
| c 453 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-473 | Sequence 473, App | c 526 | 13.8 | 0.8 | 21 | 1 | US-09-657-472-1150 | Sequence 1150, Ap |
| c 454 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-606 | Sequence 606, App | c 527 | 13.8 | 0.8 | 21 | 1 | US-09-657-472-1498 | Sequence 1498, Ap |
| c 455 | 13.8 | 0.8 | 19 | 1 | US-09-696-791-2009 | Sequence 2009, Ap | c 528 | 13.8 | 0.8 | 21 | 1 | US-09-657-472-2302 | Sequence 2302, Ap |
| c 456 | 13.8 | 0.8 | 20 | 1 | US-07-941-370-1 | Sequence 1, Appl | c 529 | 13.8 | 0.8 | 21 | 1 | US-09-771-357-31 | Sequence 31, Appl |
| c 457 | 13.8 | 0.8 | 20 | 1 | US-08-390-256-3 | Sequence 3, Appl | c 530 | 13.6 | 0.8 | 20 | 1 | US-07-972-791-24 | Sequence 24, Appl |
| c 458 | 13.8 | 0.8 | 20 | 1 | US-08-146-422-30 | Sequence 30, Appl | c 531 | 13.6 | 0.8 | 20 | 1 | US-07-626-618A-10 | Sequence 10, Appl |
| c 459 | 13.8 | 0.8 | 20 | 1 | US-08-146-424-31 | Sequence 31, Appl | c 532 | 13.6 | 0.8 | 20 | 1 | US-08-063-167A-15 | Sequence 15, Appl |
| c 460 | 13.8 | 0.8 | 20 | 1 | US-08-221-465-1 | Sequence 1, Appl | c 533 | 13.6 | 0.8 | 20 | 1 | US-08-250-856A-11 | Sequence 11, Appl |
| c 461 | 13.8 | 0.8 | 20 | 1 | US-08-221-465-3 | Sequence 3, Appl | c 534 | 13.6 | 0.8 | 20 | 1 | US-08-007-997A-15 | Sequence 15, Appl |
| c 462 | 13.8 | 0.8 | 20 | 1 | US-08-212-188-10 | Sequence 10, Appl | c 535 | 13.6 | 0.8 | 20 | 1 | US-08-333-977-10 | Sequence 10, Appl |
| c 463 | 13.8 | 0.8 | 20 | 1 | US-08-626-554-13 | Sequence 13, Appl | c 536 | 13.6 | 0.8 | 20 | 1 | US-08-474-177-29 | Sequence 29, Appl |
| c 464 | 13.8 | 0.8 | 20 | 1 | US-08-693-709-14 | Sequence 14, Appl | c 537 | 13.6 | 0.8 | 20 | 1 | US-08-487-141B-83 | Sequence 83, Appl |
| c 465 | 13.8 | 0.8 | 20 | 1 | US-08-257-963B-13 | Sequence 13, Appl | c 538 | 13.6 | 0.8 | 20 | 1 | US-08-462-305-21 | Sequence 21, Appl |
| c 466 | 13.8 | 0.8 | 20 | 1 | US-08-457-273B-13 | Sequence 13, Appl | c 539 | 13.6 | 0.8 | 20 | 1 | US-08-487-033-29 | Sequence 29, Appl |
| c 467 | 13.8 | 0.8 | 20 | 1 | US-08-962-701-1 | Sequence 1, Appl | c 540 | 13.6 | 0.8 | 20 | 1 | US-08-480-810-29 | Sequence 29, Appl |
| c 468 | 13.8 | 0.8 | 20 | 1 | US-08-962-701-3 | Sequence 3, Appl | c 541 | 13.6 | 0.8 | 20 | 1 | US-08-578-590-14 | Sequence 14, Appl |
| c 469 | 13.8 | 0.8 | 20 | 1 | US-09-018-576-4 | Sequence 4, Appl | c 542 | 13.6 | 0.8 | 20 | 1 | US-08-440-740A-15 | Sequence 15, Appl |
| c 470 | 13.8 | 0.8 | 20 | 1 | US-08-837-201C-9 | Sequence 9, Appl | c 543 | 13.6 | 0.8 | 20 | 1 | US-08-508-735-29 | Sequence 29, Appl |
| c 471 | 13.8 | 0.8 | 20 | 1 | US-09-248-137-4 | Sequence 4, Appl | c 544 | 13.6 | 0.8 | 20 | 1 | US-08-568-459A-24 | Sequence 24, Appl |

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|--------------------|--------------------|-------|------|-----|----|---|---------------------|--------------------|
| C 545 | 13.6 | 0.8 | 20 | 1 | US-08-117-952-744 | Sequence 744, Appl | 618 | 13.6 | 0.8 | 20 | 1 | US-09-898-361-103 | Sequence 103, Appl |
| C 546 | 13.6 | 0.8 | 20 | 1 | US-08-808-474A-12 | Sequence 12, Appl | 619 | 13.6 | 0.8 | 20 | 1 | US-09-668-313A-93 | Sequence 93, Appl |
| C 547 | 13.6 | 0.8 | 20 | 1 | US-08-808-474A-15 | Sequence 15, Appl | C 620 | 13.6 | 0.8 | 20 | 1 | US-09-422-978-11617 | Sequence 11617, A |
| C 548 | 13.6 | 0.8 | 20 | 1 | US-08-613-417A-21 | Sequence 21, Appl | C 621 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-2072 | Sequence 2072, Ap |
| C 549 | 13.6 | 0.8 | 20 | 1 | US-08-921-561-82 | Sequence 83, Appl | C 622 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-3394 | Sequence 3394, Ap |
| C 550 | 13.6 | 0.8 | 20 | 1 | US-08-875-154-22 | Sequence 22, Appl | C 623 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-3649 | Sequence 3649, Ap |
| C 551 | 13.6 | 0.8 | 20 | 1 | US-08-344-155C-15 | Sequence 15, Appl | C 624 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-4585 | Sequence 4585, Ap |
| C 552 | 13.6 | 0.8 | 20 | 1 | US-08-756-806A-11 | Sequence 11, Appl | C 625 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-5261 | Sequence 5261, Ap |
| C 553 | 13.6 | 0.8 | 20 | 1 | US-08-837-201C-20 | Sequence 20, Appl | C 626 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-5947 | Sequence 5947, Ap |
| C 554 | 13.6 | 0.8 | 20 | 1 | US-08-848-251-29 | Sequence 29, Appl | C 627 | 13.6 | 0.8 | 20 | 1 | US-09-198-452A-6067 | Sequence 6067, Ap |
| C 555 | 13.6 | 0.8 | 20 | 1 | US-08-487-826B-36 | Sequence 36, Appl | C 628 | 13.6 | 0.8 | 20 | 1 | US-09-670-216-1 | Sequence 1, Appl |
| C 556 | 13.6 | 0.8 | 20 | 1 | US-08-486-047-29 | Sequence 29, Appl | C 629 | 13.6 | 0.8 | 20 | 1 | US-09-670-216-2 | Sequence 2, Appl |
| C 557 | 13.6 | 0.8 | 20 | 1 | US-08-594-452-21 | Sequence 21, Appl | C 630 | 13.6 | 0.8 | 20 | 1 | US-09-692-820A-4 | Sequence 4, Appl |
| C 558 | 13.6 | 0.8 | 20 | 1 | US-08-982-845B-15 | Sequence 15, Appl | C 631 | 13.6 | 0.8 | 20 | 1 | US-09-665-615B-39 | Sequence 39, Appl |
| C 559 | 13.6 | 0.8 | 20 | 1 | US-08-578-686C-20 | Sequence 20, Appl | C 632 | 13.6 | 0.8 | 20 | 1 | US-08-278-774-24 | Sequence 24, Appl |
| C 560 | 13.6 | 0.8 | 20 | 1 | US-09-120-130-29 | Sequence 29, Appl | C 633 | 13.6 | 0.8 | 20 | 1 | US-09-870-956-33 | Sequence 33, Appl |
| C 561 | 13.6 | 0.8 | 20 | 1 | US-08-951-923-33 | Sequence 33, Appl | C 634 | 13.6 | 0.8 | 20 | 1 | US-10-215-448-70 | Sequence 70, Appl |
| C 562 | 13.6 | 0.8 | 20 | 1 | US-09-115-252-29 | Sequence 29, Appl | C 635 | 13.6 | 0.8 | 20 | 1 | US-10-215-448-102 | Sequence 102, Ap |
| C 563 | 13.6 | 0.8 | 20 | 1 | US-09-094-405-25 | Sequence 25, Appl | C 636 | 13.6 | 0.8 | 20 | 1 | US-09-747-772-3 | Sequence 3, Appl |
| C 564 | 13.6 | 0.8 | 20 | 1 | US-08-986-515-29 | Sequence 29, Appl | C 637 | 13.6 | 0.8 | 20 | 1 | US-09-747-772-4 | Sequence 4, Appl |
| C 565 | 13.6 | 0.8 | 20 | 1 | US-09-143-214-11 | Sequence 11, Appl | C 638 | 13.6 | 0.8 | 20 | 1 | US-10-029-598-2 | Sequence 2, Appl |
| C 566 | 13.6 | 0.8 | 20 | 1 | US-08-991-525B-15 | Sequence 15, Appl | C 639 | 13.6 | 0.8 | 20 | 1 | US-09-835-370-42 | Sequence 42, Appl |
| C 567 | 13.6 | 0.8 | 20 | 1 | US-09-085-759-15 | Sequence 15, Appl | C 640 | 13.6 | 0.8 | 20 | 1 | PCT-US93-08101-15 | Sequence 15, Appl |
| C 568 | 13.6 | 0.8 | 20 | 1 | US-09-358-685-31 | Sequence 31, Appl | C 641 | 13.6 | 0.8 | 20 | 1 | PCT-US95-07111A-11 | Sequence 11, Appl |
| C 569 | 13.6 | 0.8 | 20 | 1 | US-09-258-408-21 | Sequence 21, Appl | C 642 | 13.6 | 0.8 | 20 | 1 | PCT-US96-09388-83 | Sequence 83, Appl |
| C 570 | 13.6 | 0.8 | 20 | 1 | US-09-196-132-21 | Sequence 21, Appl | C 643 | 13.6 | 0.8 | 21 | 1 | US-09-657-472-2302 | Sequence 2302, Ap |
| C 571 | 13.6 | 0.8 | 20 | 1 | US-08-666-221B-30 | Sequence 30, Appl | C 644 | 13.4 | 0.8 | 15 | 1 | US-08-291-932A-320 | Sequence 320, App |
| C 572 | 13.6 | 0.8 | 20 | 1 | US-09-286-904-75 | Sequence 75, Appl | C 645 | 13.4 | 0.8 | 15 | 1 | US-09-081-646-233 | Sequence 233, App |
| C 573 | 13.6 | 0.8 | 20 | 1 | US-09-418-640-41 | Sequence 41, Appl | C 646 | 13.4 | 0.8 | 15 | 1 | US-08-584-040-8419 | Sequence 8419, Ap |
| C 574 | 13.6 | 0.8 | 20 | 1 | US-09-120-128-29 | Sequence 29, Appl | C 647 | 13.4 | 0.8 | 15 | 1 | US-09-371-772B-4075 | Sequence 4075, Ap |
| C 575 | 13.6 | 0.8 | 20 | 1 | US-09-144-112-20 | Sequence 20, Appl | C 648 | 13.4 | 0.8 | 15 | 1 | US-09-472-795B-1 | Sequence 1, Appl |
| C 576 | 13.6 | 0.8 | 20 | 1 | US-09-428-696-46 | Sequence 46, Appl | C 649 | 13.4 | 0.8 | 16 | 1 | US-09-371-772B-6994 | Sequence 6994, Ap |
| C 577 | 13.6 | 0.8 | 20 | 1 | US-09-128-496-15 | Sequence 15, Appl | C 650 | 13.4 | 0.8 | 17 | 1 | US-08-009-263C-33 | Sequence 33, Appl |
| C 578 | 13.6 | 0.8 | 20 | 1 | US-09-120-129-29 | Sequence 29, Appl | C 651 | 13.4 | 0.8 | 17 | 1 | US-08-985-162-301 | Sequence 301, App |
| C 579 | 13.6 | 0.8 | 20 | 1 | US-09-235-614-12 | Sequence 12, Appl | C 652 | 13.4 | 0.8 | 17 | 1 | US-08-838-715B-33 | Sequence 33, Appl |
| C 580 | 13.6 | 0.8 | 20 | 1 | US-09-235-614-15 | Sequence 15, Appl | C 653 | 13.4 | 0.8 | 17 | 1 | US-08-924-183-6 | Sequence 6, Appl |
| C 581 | 13.6 | 0.8 | 20 | 1 | US-09-290-640-39 | Sequence 39, Appl | C 654 | 13.4 | 0.8 | 17 | 1 | US-09-488-364-6 | Sequence 6, Appl |
| C 582 | 13.6 | 0.8 | 20 | 1 | US-09-201-139-29 | Sequence 29, Appl | C 655 | 13.4 | 0.8 | 17 | 1 | US-08-584-040-1929 | Sequence 1929, Ap |
| C 583 | 13.6 | 0.8 | 20 | 1 | US-09-030-701-65 | Sequence 65, Appl | C 656 | 13.4 | 0.8 | 17 | 1 | US-08-584-040-4221 | Sequence 4221, Ap |
| C 584 | 13.6 | 0.8 | 20 | 1 | US-09-120-131-29 | Sequence 29, Appl | C 657 | 13.4 | 0.8 | 17 | 1 | US-09-474-432B-438 | Sequence 438, App |
| C 585 | 13.6 | 0.8 | 20 | 1 | US-08-430-286A-4 | Sequence 4, Appl | C 658 | 13.4 | 0.8 | 17 | 1 | US-09-474-432B-504 | Sequence 504, App |
| C 586 | 13.6 | 0.8 | 20 | 1 | US-09-183-846A-1 | Sequence 1, Appl | C 659 | 13.4 | 0.8 | 17 | 1 | US-09-371-772B-474 | Sequence 474, App |
| C 587 | 13.6 | 0.8 | 20 | 1 | US-09-183-846A-2 | Sequence 2, Appl | C 660 | 13.4 | 0.8 | 17 | 1 | US-09-371-772B-1988 | Sequence 1988, Ap |
| C 588 | 13.6 | 0.8 | 20 | 1 | US-08-943-731-542 | Sequence 542, App | C 661 | 13.4 | 0.8 | 17 | 1 | US-09-371-772B-4764 | Sequence 4764, Ap |
| C 589 | 13.6 | 0.8 | 20 | 1 | US-09-489-868A-48 | Sequence 48, Appl | C 662 | 13.4 | 0.8 | 17 | 1 | US-03-476-387-437 | Sequence 437, App |
| C 590 | 13.6 | 0.8 | 20 | 1 | US-09-593-711A-74 | Sequence 74, Appl | C 663 | 13.4 | 0.8 | 17 | 1 | US-09-476-387-503 | Sequence 503, App |
| C 591 | 13.6 | 0.8 | 20 | 1 | US-09-109-663-36 | Sequence 36, Appl | C 664 | 13.4 | 0.8 | 17 | 1 | US-09-401-063-301 | Sequence 301, App |
| C 592 | 13.6 | 0.8 | 20 | 1 | US-09-364-416-20 | Sequence 15, Appl | C 665 | 13.4 | 0.8 | 17 | 1 | US-09-827-998-546 | Sequence 546, App |
| C 593 | 13.6 | 0.8 | 20 | 1 | US-09-364-416-20 | Sequence 20, Appl | C 666 | 13.4 | 0.8 | 17 | 1 | US-09-866-108A-66 | Sequence 66, Appl |
| C 594 | 13.6 | 0.8 | 20 | 1 | US-09-488-856A-15 | Sequence 15, Appl | C 667 | 13.4 | 0.8 | 17 | 1 | US-03-866-108A-67 | Sequence 67, Appl |
| C 595 | 13.6 | 0.8 | 20 | 1 | US-08-895-981-21 | Sequence 21, Appl | C 668 | 13.4 | 0.8 | 17 | 1 | US-09-866-108A-68 | Sequence 68, Appl |
| C 596 | 13.6 | 0.8 | 20 | 1 | US-09-657-042A-12 | Sequence 12, Appl | C 669 | 13.4 | 0.8 | 17 | 1 | US-09-866-108A-8896 | Sequence 8896, Ap |
| C 597 | 13.6 | 0.8 | 20 | 1 | US-08-082-649B-57 | Sequence 57, Appl | C 670 | 13.4 | 0.8 | 17 | 1 | US-09-866-108A-8897 | Sequence 8897, Ap |
| C 598 | 13.6 | 0.8 | 20 | 1 | US-09-268-992-28 | Sequence 28, Appl | C 671 | 13.4 | 0.8 | 17 | 1 | US-09-866-108A-8898 | Sequence 8898, Ap |
| C 599 | 13.6 | 0.8 | 20 | 1 | US-09-161-241-22 | Sequence 22, Appl | C 672 | 13.4 | 0.8 | 18 | 1 | US-08-363-240A-1197 | Sequence 1197, Ap |
| C 600 | 13.6 | 0.8 | 20 | 1 | US-08-337-120A-29 | Sequence 29, Appl | C 673 | 13.4 | 0.8 | 18 | 1 | US-03-205-960-77 | Sequence 77, Appl |
| C 601 | 13.6 | 0.8 | 20 | 1 | US-08-339-214-67 | Sequence 67, Appl | C 674 | 13.4 | 0.8 | 18 | 1 | US-03-163-485-21 | Sequence 21, Appl |
| C 602 | 13.6 | 0.8 | 20 | 1 | US-08-339-214-68 | Sequence 68, Appl | C 675 | 13.4 | 0.8 | 18 | 1 | US-09-194-842A-11 | Sequence 11, Appl |
| C 603 | 13.6 | 0.8 | 20 | 1 | US-09-210-288-24 | Sequence 24, Appl | C 676 | 13.4 | 0.8 | 18 | 1 | US-09-555-313B-18 | Sequence 18, Appl |
| C 604 | 13.6 | 0.8 | 20 | 1 | US-09-657-474-28 | Sequence 28, Appl | C 677 | 13.4 | 0.8 | 18 | 1 | US-09-422-978-8777 | Sequence 8777, Ap |
| C 605 | 13.6 | 0.8 | 20 | 1 | US-09-506-073-11 | Sequence 11, Appl | C 678 | 13.4 | 0.8 | 19 | 1 | US-07-695-564-13 | Sequence 13, Appl |
| C 606 | 13.6 | 0.8 | 20 | 1 | US-08-961-578C-1 | Sequence 1, Appl | C 679 | 13.4 | 0.8 | 19 | 1 | US-08-241-387-13 | Sequence 13, Appl |
| C 607 | 13.6 | 0.8 | 20 | 1 | US-08-961-578C-2 | Sequence 2, Appl | C 680 | 13.4 | 0.8 | 19 | 1 | US-09-297-911-24 | Sequence 24, Appl |
| C 608 | 13.6 | 0.8 | 20 | 1 | US-09-853-768-73 | Sequence 73, Appl | C 681 | 13.4 | 0.8 | 19 | 1 | US-09-696-791-879 | Sequence 879, App |
| C 609 | 13.6 | 0.8 | 20 | 1 | US-09-640-101-75 | Sequence 75, Appl | C 682 | 13.4 | 0.8 | 20 | 1 | US-07-841-652-17 | Sequence 17, Appl |
| C 610 | 13.6 | 0.8 | 20 | 1 | US-09-791-211-78 | Sequence 78, Appl | C 683 | 13.4 | 0.8 | 20 | 1 | US-08-246-982A-25 | Sequence 25, Appl |
| C 611 | 13.6 | 0.8 | 20 | 1 | US-09-851-062-47 | Sequence 47, Appl | C 684 | 13.4 | 0.8 | 20 | 1 | US-08-453-265-25 | Sequence 25, Appl |
| C 612 | 13.6 | 0.8 | 20 | 1 | US-09-517-467B-125 | Sequence 125, App | C 685 | 13.4 | 0.8 | 20 | 1 | US-08-555-678-49 | Sequence 49, Appl |
| C 613 | 13.6 | 0.8 | 20 | 1 | US-09-517-467B-280 | Sequence 280, App | C 686 | 13.4 | 0.8 | 20 | 1 | US-08-531-556-60 | Sequence 60, Appl |
| C 614 | 13.6 | 0.8 | 20 | 1 | US-09-780-049-29 | Sequence 29, Appl | C 687 | 13.4 | 0.8 | 20 | 1 | US-08-472-416-60 | Sequence 60, Appl |
| C 615 | 13.6 | 0.8 | 20 | 1 | US-09-288-679-4 | Sequence 4, Appl | C 688 | 13.4 | 0.8 | 20 | 1 | US-08-472-416-85 | Sequence 85, Appl |
| C 616 | 13.6 | 0.8 | 20 | 1 | US-09-844-525A-23 | Sequence 23, Appl | C 689 | 13.4 | 0.8 | 20 | 1 | US-08-472-416-85 | Sequence 85, Appl |
| C 617 | 13.6 | 0.8 | 20 | 1 | US-09-643-233-20 | Sequence 20, Appl | C 690 | 13.4 | 0.8 | 20 | 1 | US-08-753-979A-16 | Sequence 16, Appl |

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|---------------------|-------------------|-------|------|-----|----|---|--------------------|-------------------|
| 691 | 13.4 | 0.8 | 20 | 1 | US-08-753-979A-37 | Sequence 37, Appl | c 764 | 13.2 | 0.8 | 19 | 1 | US-09-957-189-6 | Sequence 6, Appl |
| c 692 | 13.4 | 0.8 | 20 | 1 | US-09-286-904-65 | Sequence 65, Appl | 765 | 13.2 | 0.8 | 19 | 1 | US-09-952-267B-21 | Sequence 21, Appl |
| c 693 | 13.4 | 0.8 | 20 | 1 | US-09-428-696-48 | Sequence 48, Appl | 766 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-227 | Sequence 227, App |
| c 694 | 13.4 | 0.8 | 20 | 1 | US-09-428-696-78 | Sequence 78, Appl | 767 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-228 | Sequence 228, App |
| 695 | 13.4 | 0.8 | 20 | 1 | US-09-517-584A-65 | Sequence 65, Appl | 768 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-566 | Sequence 566, App |
| 696 | 13.4 | 0.8 | 20 | 1 | US-09-050-159-36 | Sequence 36, Appl | 769 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-568 | Sequence 568, App |
| c 697 | 13.4 | 0.8 | 20 | 1 | US-09-311-260-83 | Sequence 83, Appl | 770 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-677 | Sequence 677, App |
| c 698 | 13.4 | 0.8 | 20 | 1 | US-09-457-474-1 | Sequence 1, Appl | 771 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-784 | Sequence 784, App |
| 699 | 13.4 | 0.8 | 20 | 1 | US-09-662-249A-12 | Sequence 12, Appl | 772 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-1219 | Sequence 1219, Ap |
| 700 | 13.4 | 0.8 | 20 | 1 | US-09-662-249A-13 | Sequence 13, Appl | c 773 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-1346 | Sequence 1346, Ap |
| c 701 | 13.4 | 0.8 | 20 | 1 | US-09-277-078-40 | Sequence 40, Appl | 774 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-1930 | Sequence 1930, Ap |
| 702 | 13.4 | 0.8 | 20 | 1 | US-09-270-542-157 | Sequence 157, App | 775 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-2050 | Sequence 2050, Ap |
| 703 | 13.4 | 0.8 | 20 | 1 | US-07-711-303-1 | Sequence 1, Appl | 776 | 13.2 | 0.8 | 19 | 1 | US-09-696-791-3890 | Sequence 3890, Ap |
| 704 | 13.4 | 0.8 | 20 | 1 | US-07-711-303-6 | Sequence 6, Appl | 777 | 13.2 | 0.8 | 20 | 1 | US-07-696-793A-36 | Sequence 36, Appl |
| 705 | 13.4 | 0.8 | 20 | 1 | US-07-711-303-8 | Sequence 8, Appl | 778 | 13.2 | 0.8 | 20 | 1 | US-07-977-694-36 | Sequence 36, Appl |
| 706 | 13.4 | 0.8 | 20 | 1 | US-09-702-251-26 | Sequence 26, Appl | c 779 | 13.2 | 0.8 | 20 | 1 | US-07-940-242A-41 | Sequence 41, Appl |
| c 707 | 13.4 | 0.8 | 20 | 1 | US-09-851-520-44 | Sequence 44, Appl | 780 | 13.2 | 0.8 | 20 | 1 | US-08-250-849-13 | Sequence 13, Appl |
| c 708 | 13.4 | 0.8 | 20 | 1 | US-09-640-101-65 | Sequence 65, Appl | 781 | 13.2 | 0.8 | 20 | 1 | US-07-977-630-9 | Sequence 9, Appl |
| 709 | 13.4 | 0.8 | 20 | 1 | US-09-659-845A-106 | Sequence 106, App | 782 | 13.2 | 0.8 | 20 | 1 | US-08-435-529-12 | Sequence 12, Appl |
| c 710 | 13.4 | 0.8 | 20 | 1 | US-09-422-978-7238 | Sequence 7238, Ap | c 783 | 13.2 | 0.8 | 20 | 1 | US-08-379-078-597 | Sequence 597, App |
| 711 | 13.4 | 0.8 | 20 | 1 | US-09-198-452A-2555 | Sequence 2555, Ap | c 784 | 13.2 | 0.8 | 20 | 1 | US-08-403-555-10 | Sequence 10, Appl |
| c 712 | 13.4 | 0.8 | 20 | 1 | US-09-198-452A-5490 | Sequence 5490, Ap | c 785 | 13.2 | 0.8 | 20 | 1 | US-08-328-314-13 | Sequence 13, Appl |
| 713 | 13.4 | 0.8 | 20 | 1 | US-09-679-299A-53 | Sequence 53, Appl | 786 | 13.2 | 0.8 | 20 | 1 | US-08-089-996-44 | Sequence 44, Appl |
| 714 | 13.4 | 0.8 | 20 | 1 | US-09-619-813-11 | Sequence 11, Appl | 787 | 13.2 | 0.8 | 20 | 1 | US-08-434-074-13 | Sequence 13, Appl |
| c 715 | 13.2 | 0.8 | 18 | 1 | US-08-009-263C-36 | Sequence 36, Appl | c 788 | 13.2 | 0.8 | 20 | 1 | US-08-731-045-13 | Sequence 13, Appl |
| c 716 | 13.2 | 0.8 | 18 | 1 | US-08-050-073-174 | Sequence 174, App | c 789 | 13.2 | 0.8 | 20 | 1 | US-08-466-886-10 | Sequence 10, Appl |
| 717 | 13.2 | 0.8 | 18 | 1 | US-08-432-871C-30 | Sequence 30, Appl | 790 | 13.2 | 0.8 | 20 | 1 | US-08-466-886-12 | Sequence 12, Appl |
| c 718 | 13.2 | 0.8 | 18 | 1 | US-09-156-425-22 | Sequence 22, Appl | 791 | 13.2 | 0.8 | 20 | 1 | US-08-374-155A-18 | Sequence 18, Appl |
| 719 | 13.2 | 0.8 | 18 | 1 | US-08-461-286-15 | Sequence 15, Appl | 792 | 13.2 | 0.8 | 20 | 1 | US-08-910-973-23 | Sequence 23, Appl |
| c 720 | 13.2 | 0.8 | 18 | 1 | US-09-106-038A-70 | Sequence 70, Appl | 793 | 13.2 | 0.8 | 20 | 1 | US-08-800-036-7 | Sequence 7, Appl |
| 721 | 13.2 | 0.8 | 18 | 1 | US-09-205-921-31 | Sequence 31, Appl | c 794 | 13.2 | 0.8 | 20 | 1 | US-08-117-952-120 | Sequence 120, App |
| c 722 | 13.2 | 0.8 | 18 | 1 | US-09-339-993-30 | Sequence 30, Appl | 795 | 13.2 | 0.8 | 20 | 1 | US-08-478-178A-44 | Sequence 44, Appl |
| c 723 | 13.2 | 0.8 | 18 | 1 | US-08-908-643C-70 | Sequence 70, Appl | c 796 | 13.2 | 0.8 | 20 | 1 | US-08-344-155C-88 | Sequence 88, Appl |
| c 724 | 13.2 | 0.8 | 18 | 1 | US-09-173-941-112 | Sequence 112, App | 797 | 13.2 | 0.8 | 20 | 1 | US-08-488-177-44 | Sequence 44, Appl |
| 725 | 13.2 | 0.8 | 18 | 1 | US-08-838-715B-36 | Sequence 36, Appl | c 798 | 13.2 | 0.8 | 20 | 1 | US-08-588-521-6 | Sequence 6, Appl |
| 726 | 13.2 | 0.8 | 18 | 1 | US-08-584-040-3042 | Sequence 3042, Ap | 799 | 13.2 | 0.8 | 20 | 1 | US-08-481-072A-44 | Sequence 44, Appl |
| c 727 | 13.2 | 0.8 | 18 | 1 | US-09-167-109-109 | Sequence 109, App | 800 | 13.2 | 0.8 | 20 | 1 | US-08-664-336-44 | Sequence 44, Appl |
| 728 | 13.2 | 0.8 | 18 | 1 | US-09-270-956-30 | Sequence 30, Appl | 801 | 13.2 | 0.8 | 20 | 1 | US-08-854-727-14 | Sequence 14, Appl |
| c 729 | 13.2 | 0.8 | 18 | 1 | US-09-250-609-56 | Sequence 56, Appl | c 802 | 13.2 | 0.8 | 20 | 1 | US-08-854-727-34 | Sequence 34, Appl |
| c 730 | 13.2 | 0.8 | 18 | 1 | US-09-520-760-43 | Sequence 43, Appl | 803 | 13.2 | 0.8 | 20 | 1 | US-08-663-230-11 | Sequence 11, Appl |
| c 731 | 13.2 | 0.8 | 18 | 1 | US-09-642-952-16 | Sequence 16, Appl | 804 | 13.2 | 0.8 | 20 | 1 | US-08-481-066A-44 | Sequence 44, Appl |
| c 732 | 13.2 | 0.8 | 18 | 1 | US-09-250-611-56 | Sequence 56, Appl | 805 | 13.2 | 0.8 | 20 | 1 | US-08-926-492-7 | Sequence 7, Appl |
| c 733 | 13.2 | 0.8 | 18 | 1 | US-09-422-978-7245 | Sequence 7245, Ap | c 806 | 13.2 | 0.8 | 20 | 1 | US-08-785-396-18 | Sequence 18, Appl |
| c 734 | 13.2 | 0.8 | 18 | 1 | US-09-422-978-11482 | Sequence 11482, A | c 807 | 13.2 | 0.8 | 20 | 1 | US-08-940-250-26 | Sequence 26, Appl |
| 735 | 13.2 | 0.8 | 18 | 1 | US-09-371-772B-1470 | Sequence 1470, Ap | 808 | 13.2 | 0.8 | 20 | 1 | US-08-578-615A-44 | Sequence 44, Appl |
| c 736 | 13.2 | 0.8 | 18 | 1 | US-09-927-737C-78 | Sequence 78, Appl | c 809 | 13.2 | 0.8 | 20 | 1 | US-09-357-073-47 | Sequence 47, Appl |
| 737 | 13.2 | 0.8 | 18 | 1 | US-09-494-190-121 | Sequence 121, App | 810 | 13.2 | 0.8 | 20 | 1 | US-09-357-071-18 | Sequence 18, Appl |
| c 738 | 13.2 | 0.8 | 18 | 1 | US-09-494-190-121 | Sequence 121, App | 811 | 13.2 | 0.8 | 20 | 1 | US-09-048-505-7 | Sequence 7, Appl |
| c 739 | 13.2 | 0.8 | 18 | 1 | US-09-663-834A-34 | Sequence 34, Appl | 812 | 13.2 | 0.8 | 20 | 1 | US-08-746-111-51 | Sequence 51, Appl |
| c 740 | 13.2 | 0.8 | 18 | 1 | US-09-456-222B-16 | Sequence 16, Appl | 813 | 13.2 | 0.8 | 20 | 1 | US-08-777-266A-26 | Sequence 26, Appl |
| c 741 | 13.2 | 0.8 | 18 | 1 | US-09-374-958C-77 | Sequence 77, Appl | 814 | 13.2 | 0.8 | 20 | 1 | US-08-545-196B-56 | Sequence 56, Appl |
| c 742 | 13.2 | 0.8 | 18 | 1 | US-09-374-958C-77 | Sequence 77, Appl | 815 | 13.2 | 0.8 | 20 | 1 | US-09-009-913-259 | Sequence 259, App |
| 743 | 13.2 | 0.8 | 18 | 1 | US-09-544-398B-299 | Sequence 299, App | c 816 | 13.2 | 0.8 | 20 | 1 | US-08-846-020A-37 | Sequence 37, Appl |
| 744 | 13.2 | 0.8 | 18 | 1 | US-09-696-791-4187 | Sequence 4187, Ap | 817 | 13.2 | 0.8 | 20 | 1 | US-08-872-855-15 | Sequence 15, Appl |
| 745 | 13.2 | 0.8 | 18 | 1 | US-09-696-791-4284 | Sequence 4284, Ap | c 818 | 13.2 | 0.8 | 20 | 1 | US-09-280-799-7 | Sequence 7, Appl |
| 746 | 13.2 | 0.8 | 18 | 1 | PCT-US92-02854-15 | Sequence 15, Appl | 819 | 13.2 | 0.8 | 20 | 1 | US-08-765-340-51 | Sequence 51, Appl |
| c 747 | 13.2 | 0.8 | 18 | 1 | US-08-473-096-18 | Sequence 18, Appl | 820 | 13.2 | 0.8 | 20 | 1 | US-09-433-699-16 | Sequence 16, Appl |
| c 748 | 13.2 | 0.8 | 19 | 1 | US-08-379-680-7 | Sequence 7, Appl | c 821 | 13.2 | 0.8 | 20 | 1 | US-09-513-728B-30 | Sequence 30, Appl |
| 749 | 13.2 | 0.8 | 19 | 1 | US-08-117-952-64 | Sequence 64, Appl | 822 | 13.2 | 0.8 | 20 | 1 | US-09-490-694-74 | Sequence 74, Appl |
| c 750 | 13.2 | 0.8 | 19 | 1 | US-08-899-811-11 | Sequence 11, Appl | c 823 | 13.2 | 0.8 | 20 | 1 | US-09-517-584A-13 | Sequence 13, Appl |
| 751 | 13.2 | 0.8 | 19 | 1 | US-08-899-811-11 | Sequence 11, Appl | c 824 | 13.2 | 0.8 | 20 | 1 | US-08-469-617-10 | Sequence 10, Appl |
| 752 | 13.2 | 0.8 | 19 | 1 | US-08-899-811-11 | Sequence 11, Appl | 825 | 13.2 | 0.8 | 20 | 1 | US-08-469-617-12 | Sequence 12, Appl |
| 753 | 13.2 | 0.8 | 19 | 1 | US-08-473-020A-17 | Sequence 17, Appl | c 826 | 13.2 | 0.8 | 20 | 1 | US-08-960-780-70 | Sequence 70, Appl |
| c 754 | 13.2 | 0.8 | 19 | 1 | US-08-810-599-53 | Sequence 53, Appl | 827 | 13.2 | 0.8 | 20 | 1 | US-08-960-780-116 | Sequence 116, App |
| 755 | 13.2 | 0.8 | 19 | 1 | US-09-192-104-6 | Sequence 6, Appl | c 828 | 13.2 | 0.8 | 20 | 1 | US-09-313-932-304 | Sequence 304, App |
| c 756 | 13.2 | 0.8 | 19 | 1 | US-09-543-446-6 | Sequence 6, Appl | 829 | 13.2 | 0.8 | 20 | 1 | US-09-038-637-14 | Sequence 14, Appl |
| c 757 | 13.2 | 0.8 | 19 | 1 | US-09-336-447A-21 | Sequence 21, Appl | 830 | 13.2 | 0.8 | 20 | 1 | US-09-038-637-46 | Sequence 46, Appl |
| c 758 | 13.2 | 0.8 | 19 | 1 | US-09-302-681-49 | Sequence 49, Appl | c 831 | 13.2 | 0.8 | 20 | 1 | US-09-073-898-70 | Sequence 70, Appl |
| c 759 | 13.2 | 0.8 | 19 | 1 | US-09-302-681-50 | Sequence 50, Appl | c 832 | 13.2 | 0.8 | 20 | 1 | US-09-073-898-116 | Sequence 116, App |
| c 760 | 13.2 | 0.8 | 19 | 1 | US-09-422-978-9032 | Sequence 9032, Ap | 833 | 13.2 | 0.8 | 20 | 1 | US-08-969-317-12 | Sequence 12, Appl |
| c 761 | 13.2 | 0.8 | 19 | 1 | US-09-422-978-9036 | Sequence 11036, A | 834 | 13.2 | 0.8 | 20 | 1 | US-08-968-733-14 | Sequence 14, Appl |
| 762 | 13.2 | 0.8 | 19 | 1 | US-09-422-978-11495 | Sequence 11495, A | 835 | 13.2 | 0.8 | 20 | 1 | US-08-968-733-46 | Sequence 46, Appl |
| c 763 | 13.2 | 0.8 | 19 | 1 | | | c 836 | 13.2 | 0.8 | 20 | 1 | | |

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|-------|------|-----|----|---|---------------------|-------------------|------|-----|----|---|---------------------|-------------------|
| C 837 | 13.2 | 0.8 | 20 | 1 | US-07-974-409C-221 | Sequence 221, App | 13 | 0.7 | 17 | 1 | US-09-371-772B-2069 | Sequence 2069, Ap |
| C 838 | 13.2 | 0.8 | 20 | 1 | US-09-484-617-121 | Sequence 121, App | 13 | 0.7 | 17 | 1 | US-09-371-772B-3449 | Sequence 3449, Ap |
| C 839 | 13.2 | 0.8 | 20 | 1 | US-09-484-617-165 | Sequence 165, App | 13 | 0.7 | 17 | 1 | US-09-371-772B-3461 | Sequence 3461, Ap |
| C 840 | 13.2 | 0.8 | 20 | 1 | US-09-484-617-174 | Sequence 174, App | 13 | 0.7 | 17 | 1 | US-09-371-772B-6704 | Sequence 6704, Ap |
| C 841 | 13.2 | 0.8 | 20 | 1 | US-09-193-562D-23 | Sequence 23, App | 13 | 0.7 | 17 | 1 | US-09-371-772B-6819 | Sequence 6819, Ap |
| C 842 | 13.2 | 0.8 | 20 | 1 | US-09-326-186B-26 | Sequence 26, App | 13 | 0.7 | 17 | 1 | US-09-827-998-540 | Sequence 540, App |
| C 843 | 13.2 | 0.8 | 20 | 1 | US-08-829-637A-44 | Sequence 44, App | 13 | 0.7 | 17 | 1 | US-08-361-479-29 | Sequence 29, Appl |
| C 844 | 13.2 | 0.8 | 20 | 1 | US-09-617-871-37 | Sequence 37, Appl | 13 | 0.7 | 18 | 1 | US-08-473-576-29 | Sequence 29, Appl |
| C 845 | 13.2 | 0.8 | 20 | 1 | US-09-049-698-29 | Sequence 29, Appl | 13 | 0.7 | 18 | 1 | US-08-843-718-29 | Sequence 29, Appl |
| C 846 | 13.2 | 0.8 | 20 | 1 | US-09-561-497-70 | Sequence 70, Appl | 13 | 0.7 | 18 | 1 | US-09-029-213B-20 | Sequence 20, Appl |
| C 847 | 13.2 | 0.8 | 20 | 1 | US-09-702-327-46 | Sequence 46, Appl | 13 | 0.7 | 18 | 1 | US-09-155-885A-248 | Sequence 248, App |
| C 848 | 13.2 | 0.8 | 20 | 1 | US-09-222-938A-82 | Sequence 82, Appl | 13 | 0.7 | 18 | 1 | US-09-254-352B-33 | Sequence 33, Appl |
| C 849 | 13.2 | 0.8 | 20 | 1 | US-09-780-175-139 | Sequence 139, App | 13 | 0.7 | 19 | 1 | US-09-696-791-19 | Sequence 19, Appl |
| C 850 | 13.2 | 0.8 | 20 | 1 | US-09-456-773-7 | Sequence 7, Appli | 13 | 0.7 | 19 | 1 | US-08-136-811-15 | Sequence 15, Appl |
| C 851 | 13.2 | 0.8 | 20 | 1 | US-09-439-227-23 | Sequence 23, Appl | 13 | 0.7 | 20 | 1 | US-08-495-034-11 | Sequence 11, Appl |
| C 852 | 13.2 | 0.8 | 20 | 1 | US-09-656-675A-71 | Sequence 71, Appl | 13 | 0.7 | 20 | 1 | US-08-835-770-11 | Sequence 11, Appl |
| C 853 | 13.2 | 0.8 | 20 | 1 | US-09-851-062-43 | Sequence 43, Appl | 13 | 0.7 | 20 | 1 | US-08-628-731-15 | Sequence 15, Appl |
| C 854 | 13.2 | 0.8 | 20 | 1 | US-09-517-467B-344 | Sequence 344, App | 13 | 0.7 | 20 | 1 | US-08-757-653-164 | Sequence 164, App |
| C 855 | 13.2 | 0.8 | 20 | 1 | US-09-254-322-44 | Sequence 44, Appl | 13 | 0.7 | 20 | 1 | US-08-669-753-27 | Sequence 27, Appl |
| C 856 | 13.2 | 0.8 | 20 | 1 | US-09-164-764-14 | Sequence 14, Appl | 13 | 0.7 | 20 | 1 | US-08-743-637B-199 | Sequence 199, App |
| C 857 | 13.2 | 0.8 | 20 | 1 | US-09-164-764-34 | Sequence 34, Appl | 13 | 0.7 | 20 | 1 | US-08-823-516-62 | Sequence 62, Appl |
| C 858 | 13.2 | 0.8 | 20 | 1 | US-09-920-668-37 | Sequence 37, Appl | 13 | 0.7 | 20 | 1 | US-09-289-067-68 | Sequence 68, Appl |
| C 859 | 13.2 | 0.8 | 20 | 1 | US-08-961-309-39 | Sequence 39, Appl | 13 | 0.7 | 20 | 1 | US-09-018-034-1 | Sequence 1, Appli |
| C 860 | 13.2 | 0.8 | 20 | 1 | US-08-388-852B-29 | Sequence 29, Appl | 13 | 0.7 | 20 | 1 | US-09-018-034-8 | Sequence 8, Appli |
| C 861 | 13.2 | 0.8 | 20 | 1 | US-09-422-978-5836 | Sequence 5836, Ap | 13 | 0.7 | 20 | 1 | US-09-018-034-15 | Sequence 15, Appl |
| C 862 | 13.2 | 0.8 | 20 | 1 | US-09-422-978-5872 | Sequence 8572, Ap | 13 | 0.7 | 20 | 1 | US-08-777-266A-66 | Sequence 66, Appl |
| C 863 | 13.2 | 0.8 | 20 | 1 | US-10-025-139-44 | Sequence 44, Appl | 13 | 0.7 | 20 | 1 | US-09-166-186-80 | Sequence 80, Appl |
| C 864 | 13.2 | 0.8 | 20 | 1 | US-09-198-452A-3591 | Sequence 3591, Ap | 13 | 0.7 | 20 | 1 | US-08-759-038-103 | Sequence 103, App |
| C 865 | 13.2 | 0.8 | 20 | 1 | US-09-198-452A-3605 | Sequence 3605, Ap | 13 | 0.7 | 20 | 1 | US-08-758-314-103 | Sequence 103, App |
| C 866 | 13.2 | 0.8 | 20 | 1 | US-09-198-452A-4303 | Sequence 4303, Ap | 13 | 0.7 | 20 | 1 | US-08-817-177-9 | Sequence 9, Appli |
| C 867 | 13.2 | 0.8 | 20 | 1 | US-09-198-452A-4426 | Sequence 4426, Ap | 13 | 0.7 | 20 | 1 | US-09-428-696-49 | Sequence 49, Appl |
| C 868 | 13.2 | 0.8 | 20 | 1 | US-09-198-452A-4963 | Sequence 4963, Ap | 13 | 0.7 | 20 | 1 | US-09-226-012-47 | Sequence 47, Appl |
| C 869 | 13.2 | 0.8 | 20 | 1 | US-09-843-376-22 | Sequence 22, Appl | 13 | 0.7 | 20 | 1 | US-09-313-932-80 | Sequence 80, Appl |
| C 870 | 13.2 | 0.8 | 20 | 1 | US-09-780-045-101 | Sequence 101, App | 13 | 0.7 | 20 | 1 | US-09-326-186B-66 | Sequence 66, Appl |
| C 871 | 13.2 | 0.8 | 20 | 1 | US-09-307-106-20 | Sequence 20, Appl | 13 | 0.7 | 20 | 1 | US-09-732-199A-19 | Sequence 19, Appl |
| C 872 | 13.2 | 0.8 | 20 | 1 | US-09-307-106-27 | Sequence 27, Appl | 13 | 0.7 | 20 | 1 | US-09-575-506-1 | Sequence 1, Appli |
| C 873 | 13.2 | 0.8 | 20 | 1 | US-09-723-368-5 | Sequence 5, Appli | 13 | 0.7 | 20 | 1 | US-09-575-506-8 | Sequence 8, Appli |
| C 874 | 13.2 | 0.8 | 20 | 1 | US-09-860-473-46 | Sequence 46, Appl | 13 | 0.7 | 20 | 1 | US-09-575-506-15 | Sequence 15, Appl |
| C 875 | 13.2 | 0.8 | 20 | 1 | US-09-860-473-93 | Sequence 93, Appl | 13 | 0.7 | 20 | 1 | US-09-684-938-103 | Sequence 103, App |
| C 876 | 13.2 | 0.8 | 20 | 1 | US-09-860-473-155 | Sequence 155, App | 13 | 0.7 | 20 | 1 | US-09-198-452A-3020 | Sequence 3020, Ap |
| C 877 | 13.2 | 0.8 | 20 | 1 | US-09-850-351A-70 | Sequence 70, Appl | 13 | 0.7 | 20 | 1 | US-09-198-452A-3023 | Sequence 3023, Ap |
| C 878 | 13.2 | 0.8 | 20 | 1 | US-09-850-351A-116 | Sequence 116, App | 13 | 0.7 | 20 | 1 | US-09-308-825A-103 | Sequence 103, App |
| C 879 | 13.2 | 0.8 | 20 | 1 | US-09-747-391-169 | Sequence 169, App | 13 | 0.7 | 20 | 1 | US-09-758-282B-52 | Sequence 52, Appl |
| C 880 | 13.2 | 0.8 | 20 | 1 | US-09-980-052-25 | Sequence 25, Appl | 13 | 0.7 | 20 | 1 | US-09-151-376-33 | Sequence 33, Appl |
| C 881 | 13.2 | 0.8 | 20 | 1 | US-09-980-052-91 | Sequence 81, Appl | 13 | 0.7 | 20 | 1 | US-09-548-797B-70 | Sequence 70, Appl |
| C 882 | 13.2 | 0.8 | 20 | 1 | US-10-055-412B-23 | Sequence 23, Appl | 13 | 0.7 | 20 | 1 | US-09-548-797B-117 | Sequence 117, App |
| C 883 | 13.2 | 0.8 | 20 | 1 | US-10-011-119A-7 | Sequence 7, Appli | 13 | 0.7 | 20 | 1 | US-09-940-344-62 | Sequence 62, Appl |
| C 884 | 13.2 | 0.8 | 20 | 1 | US-09-578-921A-4 | Sequence 10, Appl | 13 | 0.7 | 20 | 1 | US-09-577-304A-52 | Sequence 52, Appl |
| C 885 | 13.2 | 0.8 | 20 | 1 | US-08-469-630-10 | Sequence 12, Appl | 13 | 0.7 | 20 | 1 | PCT-US95-12686-9 | Sequence 9, Appli |
| C 886 | 13.2 | 0.8 | 20 | 1 | US-08-469-630-12 | Sequence 18, Appl | 12.8 | 0.7 | 16 | 1 | US-09-091-952A-72 | Sequence 72, Appl |
| C 887 | 13.2 | 0.8 | 20 | 1 | US-08-943-667-18 | Sequence 18, Appl | 12.8 | 0.7 | 16 | 1 | US-09-765-400-23 | Sequence 23, Appl |
| C 888 | 13.2 | 0.8 | 20 | 1 | US-09-967-655-18 | Sequence 18, Appl | 12.8 | 0.7 | 16 | 1 | US-09-765-400-60 | Sequence 60, Appl |
| C 889 | 13.2 | 0.8 | 20 | 1 | US-09-546-596A-52 | Sequence 52, Appl | 12.8 | 0.7 | 16 | 1 | US-09-705-400-23 | Sequence 23, Appl |
| C 890 | 13.2 | 0.8 | 20 | 1 | US-09-895-585-8 | Sequence 8, Appli | 12.8 | 0.7 | 16 | 1 | US-09-705-400-60 | Sequence 60, Appl |
| C 891 | 13.2 | 0.8 | 20 | 1 | US-09-574-779B-69 | Sequence 69, Appl | 12.8 | 0.7 | 17 | 1 | US-07-752-101A-24 | Sequence 24, Appl |
| C 892 | 13.2 | 0.8 | 20 | 1 | US-09-917-963-36 | Sequence 36, Appl | 12.8 | 0.7 | 17 | 1 | US-08-009-263C-29 | Sequence 29, Appl |
| C 893 | 13.2 | 0.8 | 20 | 1 | US-09-948-909-14 | Sequence 14, Appl | 12.8 | 0.7 | 17 | 1 | US-08-373-124A-1337 | Sequence 1337, Ap |
| C 894 | 13.2 | 0.8 | 20 | 1 | US-09-948-909-46 | Sequence 46, Appl | 12.8 | 0.7 | 17 | 1 | US-08-323-643B-6 | Sequence 6, Appli |
| C 895 | 13.2 | 0.8 | 20 | 1 | US-10-044-671-10 | Sequence 10, Appl | 12.8 | 0.7 | 17 | 1 | US-08-435-628-1337 | Sequence 1337, Ap |
| C 896 | 13.2 | 0.8 | 20 | 1 | US-09-432-361-8 | Sequence 8, Appli | 12.8 | 0.7 | 17 | 1 | US-08-292-620A-1675 | Sequence 1675, Ap |
| C 897 | 13.2 | 0.8 | 20 | 1 | PCT-US93-00977-221 | Sequence 221, App | 12.8 | 0.7 | 17 | 1 | US-08-292-620A-1692 | Sequence 1692, Ap |
| C 898 | 13.2 | 0.8 | 20 | 1 | PCT-US93-02213-44 | Sequence 44, Appl | 12.8 | 0.7 | 17 | 1 | US-08-232-620A-1973 | Sequence 1973, Ap |
| C 899 | 13.2 | 0.8 | 20 | 1 | US-09-948-909-14 | Sequence 44, Appl | 12.8 | 0.7 | 17 | 1 | US-08-370-156-17 | Sequence 17, Appl |
| C 900 | 13.2 | 0.8 | 20 | 1 | PCT-US94-07770-44 | Sequence 14, Appl | 12.8 | 0.7 | 17 | 1 | US-08-485-133-14 | Sequence 14, Appl |
| C 901 | 13.2 | 0.8 | 20 | 1 | PCT-US93-11233-14 | Sequence 34, Appl | 12.8 | 0.7 | 17 | 1 | US-08-654-623-59 | Sequence 59, Appl |
| C 902 | 13 | 0.7 | 15 | 1 | US-08-291-932A-318 | Sequence 318, App | 12.8 | 0.7 | 17 | 1 | US-08-641-291A-28 | Sequence 28, Appl |
| C 903 | 13 | 0.7 | 15 | 1 | US-09-043-123-5 | Sequence 5, Appli | 12.8 | 0.7 | 17 | 1 | US-08-985-162-637 | Sequence 637, App |
| C 904 | 13 | 0.7 | 15 | 1 | US-09-475-947A-267 | Sequence 267, App | 12.8 | 0.7 | 17 | 1 | US-08-658-136-8 | Sequence 8, Appli |
| C 905 | 13 | 0.7 | 17 | 1 | US-08-192-300-6 | Sequence 6, Appli | 12.8 | 0.7 | 17 | 1 | US-08-658-136-57 | Sequence 57, Appl |
| C 906 | 13 | 0.7 | 17 | 1 | US-08-881-450A-15 | Sequence 15, Appl | 12.8 | 0.7 | 17 | 1 | US-09-071-845-1675 | Sequence 1675, Ap |
| C 907 | 13 | 0.7 | 17 | 1 | US-08-584-040-4302 | Sequence 4302, Ap | 12.8 | 0.7 | 17 | 1 | US-09-071-845-1692 | Sequence 1692, Ap |
| C 908 | 13 | 0.7 | 17 | 1 | US-08-584-040-7660 | Sequence 7660, Ap | 12.8 | 0.7 | 17 | 1 | US-09-071-845-1973 | Sequence 1973, Ap |
| C 909 | 13 | 0.7 | 17 | 1 | US-08-584-040-7676 | Sequence 7676, Ap | 12.8 | 0.7 | 17 | 1 | US-08-838-715B-29 | Sequence 29, Appl |

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|----------------------|-------------------|-------|------|-----|----|---|---------------------|-------------------|
| 983 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-1831 | Sequence 1831, Ap | 1056 | 12.8 | 0.7 | 18 | 1 | US-08-323-443B-8 | Sequence 8, Appl |
| 984 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-1996 | Sequence 1996, Ap | c1057 | 12.8 | 0.7 | 18 | 1 | US-08-363-585-75 | Sequence 75, Appl |
| c 985 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-4361 | Sequence 4361, Ap | c1058 | 12.8 | 0.7 | 18 | 1 | US-08-363-585-99 | Sequence 99, Appl |
| c 986 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-7577 | Sequence 7577, Ap | c1059 | 12.8 | 0.7 | 18 | 1 | US-08-358-995-18 | Sequence 18, Appl |
| c 987 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-7578 | Sequence 7578, Ap | c1060 | 12.8 | 0.7 | 18 | 1 | US-08-309-512-50 | Sequence 50, Appl |
| c 988 | 12.8 | 0.7 | 17 | 1 | US-08-584-040-7626 | Sequence 7626, Ap | c1061 | 12.8 | 0.7 | 18 | 1 | US-08-132-168A-10 | Sequence 10, Appl |
| 989 | 12.8 | 0.7 | 17 | 1 | US-09-160-496-5 | Sequence 5, Appl | c1062 | 12.8 | 0.7 | 18 | 1 | US-08-739-401A-1 | Sequence 1, Appl |
| 990 | 12.8 | 0.7 | 17 | 1 | US-08-679-645-226 | Sequence 226, App | c1063 | 12.8 | 0.7 | 18 | 1 | US-09-205-922-60 | Sequence 60, Appl |
| c 991 | 12.8 | 0.7 | 17 | 1 | US-09-125-619-8 | Sequence 8, Appl | c1064 | 12.8 | 0.7 | 18 | 1 | US-09-205-204-15 | Sequence 15, Appl |
| 992 | 12.8 | 0.7 | 17 | 1 | US-09-474-432B-477 | Sequence 477, App | c1065 | 12.8 | 0.7 | 18 | 1 | US-09-161-015-32 | Sequence 32, Appl |
| 993 | 12.8 | 0.7 | 17 | 1 | US-09-474-432B-691 | Sequence 691, App | c1066 | 12.8 | 0.7 | 18 | 1 | US-09-197-008-13 | Sequence 13, Appl |
| 994 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-376 | Sequence 376, App | c1067 | 12.8 | 0.7 | 18 | 1 | US-09-205-860-10 | Sequence 10, Appl |
| 995 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-541 | Sequence 541, App | c1068 | 12.8 | 0.7 | 18 | 1 | US-08-743-637B-136 | Sequence 136, App |
| c 996 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-2128 | Sequence 2128, Ap | c1069 | 12.8 | 0.7 | 18 | 1 | US-08-857-946-14 | Sequence 14, Appl |
| c 997 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-3373 | Sequence 3373, Ap | c1070 | 12.8 | 0.7 | 18 | 1 | US-08-480-655-33 | Sequence 33, Appl |
| c 998 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-3374 | Sequence 3374, Ap | c1071 | 12.8 | 0.7 | 18 | 1 | US-08-526-840B-136 | Sequence 136, App |
| c 999 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-3418 | Sequence 3418, Ap | c1072 | 12.8 | 0.7 | 18 | 1 | US-09-156-253-18 | Sequence 18, Appl |
| 1000 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-4833 | Sequence 4833, Ap | c1073 | 12.8 | 0.7 | 18 | 1 | US-09-156-253-20 | Sequence 20, Appl |
| 1001 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-4834 | Sequence 4834, Ap | c1074 | 12.8 | 0.7 | 18 | 1 | US-09-205-921-8 | Sequence 8, Appl |
| c1002 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5010 | Sequence 5010, Ap | c1075 | 12.8 | 0.7 | 18 | 1 | US-09-205-921-17 | Sequence 17, Appl |
| c1003 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5011 | Sequence 5011, Ap | c1076 | 12.8 | 0.7 | 18 | 1 | US-08-970-740-14 | Sequence 14, Appl |
| c1004 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5121 | Sequence 5121, Ap | c1077 | 12.8 | 0.7 | 18 | 1 | US-08-838-545-9 | Sequence 9, Appl |
| c1005 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5122 | Sequence 5122, Ap | c1078 | 12.8 | 0.7 | 18 | 1 | US-08-658-136-10 | Sequence 10, Appl |
| 1006 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5679 | Sequence 6679, Ap | c1079 | 12.8 | 0.7 | 18 | 1 | US-09-289-466-79 | Sequence 79, Appl |
| c1007 | 12.8 | 0.7 | 17 | 1 | US-09-371-772B-5680 | Sequence 6680, Ap | c1080 | 12.8 | 0.7 | 18 | 1 | US-08-643-212-37 | Sequence 37, Appl |
| 1008 | 12.8 | 0.7 | 17 | 1 | US-09-476-387-476 | Sequence 476, App | c1081 | 12.8 | 0.7 | 18 | 1 | US-09-323-424-4 | Sequence 4, Appl |
| c1009 | 12.8 | 0.7 | 17 | 1 | US-09-476-387-690 | Sequence 690, App | c1082 | 12.8 | 0.7 | 18 | 1 | US-09-455-683-33 | Sequence 33, Appl |
| c1010 | 12.8 | 0.7 | 17 | 1 | US-09-401-063-637 | Sequence 637, App | c1083 | 12.8 | 0.7 | 18 | 1 | US-09-349-532-9 | Sequence 9, Appl |
| c1011 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-124 | Sequence 124, App | c1084 | 12.8 | 0.7 | 18 | 1 | US-09-496-694B-99 | Sequence 99, Appl |
| c1012 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-125 | Sequence 125, App | c1085 | 12.8 | 0.7 | 18 | 1 | US-08-584-040-4500 | Sequence 4500, Ap |
| c1013 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-126 | Sequence 126, App | c1086 | 12.8 | 0.7 | 18 | 1 | US-08-584-040-6250 | Sequence 6250, Ap |
| c1014 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-127 | Sequence 127, App | c1087 | 12.8 | 0.7 | 18 | 1 | US-09-504-358-39 | Sequence 39, Appl |
| 1015 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-574 | Sequence 574, App | c1088 | 12.8 | 0.7 | 18 | 1 | US-09-205-995-18 | Sequence 18, Appl |
| 1016 | 12.8 | 0.7 | 17 | 1 | US-09-827-998-577 | Sequence 577, App | c1089 | 12.8 | 0.7 | 18 | 1 | US-09-387-341-115 | Sequence 115, App |
| c1017 | 12.8 | 0.7 | 17 | 1 | US-09-875-318A-2 | Sequence 2, Appl | c1090 | 12.8 | 0.7 | 18 | 1 | US-09-954-314-39 | Sequence 39, Appl |
| c1018 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-660 | Sequence 660, App | c1091 | 12.8 | 0.7 | 18 | 1 | US-09-475-947A-20 | Sequence 20, Appl |
| 1019 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-661 | Sequence 661, App | c1092 | 12.8 | 0.7 | 18 | 1 | US-09-336-946B-42 | Sequence 42, Appl |
| c1020 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-1525 | Sequence 1525, Ap | c1093 | 12.8 | 0.7 | 18 | 1 | US-09-422-978-5796 | Sequence 5796, Ap |
| c1021 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-1527 | Sequence 1527, Ap | c1094 | 12.8 | 0.7 | 18 | 1 | US-09-422-978-9033 | Sequence 9033, Ap |
| 1022 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6007 | Sequence 6007, Ap | c1095 | 12.8 | 0.7 | 18 | 1 | US-09-371-772B-2213 | Sequence 2213, Ap |
| 1023 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6008 | Sequence 6008, Ap | c1096 | 12.8 | 0.7 | 18 | 1 | US-09-371-772B-3009 | Sequence 3009, Ap |
| 1024 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6009 | Sequence 6009, Ap | c1097 | 12.8 | 0.7 | 18 | 1 | US-09-585-174-25 | Sequence 25, Appl |
| 1025 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6010 | Sequence 6010, Ap | c1098 | 12.8 | 0.7 | 18 | 1 | US-09-696-791-4228 | Sequence 4228, Ap |
| 1026 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6258 | Sequence 6258, Ap | c1099 | 12.8 | 0.7 | 18 | 1 | US-09-696-791-4283 | Sequence 4283, Ap |
| 1027 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6259 | Sequence 6259, Ap | c1100 | 12.8 | 0.7 | 18 | 1 | US-10-230-562-39 | Sequence 39, Appl |
| c1028 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6339 | Sequence 6339, Ap | c1101 | 12.8 | 0.7 | 18 | 1 | US-09-500-700-68 | Sequence 68, Appl |
| c1029 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6340 | Sequence 6340, Ap | c1102 | 12.8 | 0.7 | 17 | 1 | US-08-473-020A-17 | Sequence 17, Appl |
| c1030 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6341 | Sequence 6341, Ap | c1103 | 12.8 | 0.7 | 19 | 1 | US-08-631-200-39 | Sequence 39, Appl |
| c1031 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6342 | Sequence 6342, Ap | c1104 | 12.8 | 0.7 | 19 | 1 | US-08-748-591-21 | Sequence 21, Appl |
| c1032 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6794 | Sequence 6794, Ap | c1105 | 12.8 | 0.7 | 19 | 1 | US-08-912-976-28 | Sequence 28, Appl |
| c1033 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-6797 | Sequence 6797, Ap | c1106 | 12.8 | 0.7 | 19 | 1 | US-08-829-553-39 | Sequence 39, Appl |
| c1034 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-7036 | Sequence 7036, Ap | c1107 | 12.8 | 0.7 | 19 | 1 | US-08-922-267A-39 | Sequence 39, Appl |
| c1035 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-7037 | Sequence 7037, Ap | c1108 | 12.8 | 0.7 | 19 | 1 | US-08-936-707A-39 | Sequence 39, Appl |
| c1036 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-7530 | Sequence 7530, Ap | c1109 | 12.8 | 0.7 | 19 | 1 | US-08-936-706A-39 | Sequence 39, Appl |
| c1037 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-7531 | Sequence 7531, Ap | c1110 | 12.8 | 0.7 | 19 | 1 | US-08-665-259-53 | Sequence 53, Appl |
| 1038 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8044 | Sequence 8044, Ap | c1111 | 12.8 | 0.7 | 19 | 1 | US-08-762-500-53 | Sequence 53, Appl |
| 1039 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8046 | Sequence 8046, Ap | c1112 | 12.8 | 0.7 | 19 | 1 | US-08-750-064-19 | Sequence 19, Appl |
| 1040 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8303 | Sequence 8303, Ap | c1113 | 12.8 | 0.7 | 19 | 1 | US-09-248-203-39 | Sequence 39, Appl |
| 1041 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8304 | Sequence 8304, Ap | c1114 | 12.8 | 0.7 | 19 | 1 | US-08-851-843A-95 | Sequence 95, Appl |
| 1042 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8998 | Sequence 8998, Ap | c1115 | 12.8 | 0.7 | 19 | 1 | US-08-974-549A-387 | Sequence 387, App |
| 1043 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-8999 | Sequence 8999, Ap | c1116 | 12.8 | 0.7 | 19 | 1 | US-08-960-780-84 | Sequence 84, Appl |
| c1044 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-9023 | Sequence 9023, Ap | c1117 | 12.8 | 0.7 | 19 | 1 | US-08-960-780-122 | Sequence 122, App |
| c1045 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-9024 | Sequence 9024, Ap | c1118 | 12.8 | 0.7 | 19 | 1 | US-09-406-071-39 | Sequence 39, Appl |
| 1046 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10009 | Sequence 10009, A | c1119 | 12.8 | 0.7 | 19 | 1 | US-09-102-491-9 | Sequence 9, Appl |
| 1047 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10011 | Sequence 10011, A | c1120 | 12.8 | 0.7 | 19 | 1 | US-09-073-898-84 | Sequence 84, Appl |
| 1048 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10403 | Sequence 10403, A | c1121 | 12.8 | 0.7 | 19 | 1 | US-09-073-898-122 | Sequence 122, App |
| 1049 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10404 | Sequence 10404, A | c1122 | 12.8 | 0.7 | 19 | 1 | US-08-854-050-95 | Sequence 95, Appl |
| c1050 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10663 | Sequence 10663, A | c1123 | 12.8 | 0.7 | 19 | 1 | US-09-338-907-533 | Sequence 533, App |
| c1051 | 12.8 | 0.7 | 17 | 1 | US-09-866-108A-10665 | Sequence 10665, A | c1124 | 12.8 | 0.7 | 19 | 1 | US-09-313-183A-11 | Sequence 11, Appl |
| c1052 | 12.8 | 0.7 | 17 | 1 | US-10-222-566-8 | Sequence 8, Appl | c1125 | 12.8 | 0.7 | 19 | 1 | US-09-430-323-95 | Sequence 95, Appl |
| c1053 | 12.8 | 0.7 | 17 | 1 | US-10-143-024A-8 | Sequence 8, Appl | c1126 | 12.8 | 0.7 | 19 | 1 | US-09-218-207-533 | Sequence 533, App |
| 1054 | 12.8 | 0.7 | 17 | 1 | US-08-319-492B-727 | Sequence 727, App | c1127 | 12.8 | 0.7 | 19 | 1 | US-08-912-951-154 | Sequence 154, App |
| c1055 | 12.8 | 0.7 | 18 | 1 | US-08-233-009-41 | Sequence 41, Appl | c1128 | 12.8 | 0.7 | 19 | 1 | US-09-422-978-4919 | Sequence 4919, Ap |

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|-------|------|-----|----|---|---------------------|--------------------|-------|------|-----|----|---|---------------------|--------------------|
| c1129 | 12.8 | 0.7 | 19 | 1 | US-09-422-978-7743 | Sequence 7743, Ap | c1202 | 12.6 | 0.7 | 19 | 1 | US-09-672-717-38 | Sequence 38, Appl |
| c1130 | 12.8 | 0.7 | 19 | 1 | US-09-814-986-39 | Sequence 39, Appl | 1203 | 12.6 | 0.7 | 19 | 1 | US-09-672-717-118 | Sequence 118, App |
| c1131 | 12.8 | 0.7 | 19 | 1 | US-09-402-181B-387 | Sequence 387, App | 1204 | 12.6 | 0.7 | 19 | 1 | US-09-672-717-214 | Sequence 214, App |
| c1132 | 12.8 | 0.7 | 19 | 1 | US-09-721-456-387 | Sequence 387, App | 1205 | 12.6 | 0.7 | 19 | 1 | US-08-981-780-80 | Sequence 80, Appl |
| c1133 | 12.8 | 0.7 | 19 | 1 | US-09-850-351A-84 | Sequence 84, Appl | 1206 | 12.6 | 0.7 | 19 | 1 | US-08-983-605-78 | Sequence 78, Appl |
| c1134 | 12.8 | 0.7 | 19 | 1 | US-09-850-351A-122 | Sequence 122, App | 1207 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-166 | Sequence 166, App |
| c1135 | 12.8 | 0.7 | 19 | 1 | US-09-495-714C-47 | Sequence 47, Appl | 1208 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-218 | Sequence 218, App |
| c1136 | 12.8 | 0.7 | 19 | 1 | US-09-155-885A-55 | Sequence 55, Appl | 1209 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-219 | Sequence 219, App |
| c1137 | 12.8 | 0.7 | 19 | 1 | US-09-686-791-215 | Sequence 215, App | 1210 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-226 | Sequence 226, App |
| c1138 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-300 | Sequence 300, App | 1211 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-238 | Sequence 238, App |
| c1139 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-301 | Sequence 301, App | 1212 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-239 | Sequence 239, App |
| c1140 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-326 | Sequence 326, App | 1213 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-314 | Sequence 314, App |
| c1141 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-327 | Sequence 327, App | 1214 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-346 | Sequence 346, App |
| c1142 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-718 | Sequence 718, App | 1215 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-353 | Sequence 353, App |
| c1143 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2018 | Sequence 2018, App | 1216 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-359 | Sequence 359, App |
| c1144 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2019 | Sequence 2019, App | 1217 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-472 | Sequence 472, App |
| c1145 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2474 | Sequence 2474, App | 1218 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-474 | Sequence 474, App |
| c1146 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2971 | Sequence 2971, App | 1219 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-539 | Sequence 539, App |
| c1147 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2972 | Sequence 2972, App | 1220 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-567 | Sequence 567, App |
| c1148 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-2973 | Sequence 2973, App | 1221 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-720 | Sequence 720, App |
| c1149 | 12.8 | 0.7 | 19 | 1 | US-09-696-791-3579 | Sequence 3579, App | 1222 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-979 | Sequence 979, App |
| c1150 | 12.6 | 0.7 | 18 | 1 | US-09-163-485-22 | Sequence 22, Appl | 1223 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-981 | Sequence 981, App |
| c1151 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2050 | Sequence 2050, App | 1224 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-1220 | Sequence 1220, App |
| c1152 | 12.6 | 0.7 | 19 | 1 | US-07-922-723A-21 | Sequence 21, Appl | 1225 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-1920 | Sequence 1920, App |
| c1153 | 12.6 | 0.7 | 19 | 1 | US-07-799-828C-21 | Sequence 21, Appl | 1226 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-1957 | Sequence 1957, App |
| c1154 | 12.6 | 0.7 | 19 | 1 | US-08-474-542A-80 | Sequence 80, Appl | 1227 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2010 | Sequence 2010, App |
| c1155 | 12.6 | 0.7 | 19 | 1 | US-08-079-110A-6 | Sequence 6, Appl | 1228 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2367 | Sequence 2367, App |
| c1156 | 12.6 | 0.7 | 19 | 1 | US-08-222-177A-381 | Sequence 381, App | 1229 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2368 | Sequence 2368, App |
| c1157 | 12.6 | 0.7 | 19 | 1 | US-08-379-078-706 | Sequence 706, App | 1230 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2541 | Sequence 2541, App |
| c1158 | 12.6 | 0.7 | 19 | 1 | US-08-457-648-80 | Sequence 80, Appl | 1231 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2543 | Sequence 2543, App |
| c1159 | 12.6 | 0.7 | 19 | 1 | US-08-196-630A-7 | Sequence 7, Appl | 1232 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-2656 | Sequence 2656, App |
| c1160 | 12.6 | 0.7 | 19 | 1 | US-08-356-287-24 | Sequence 24, Appl | 1233 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3002 | Sequence 3002, App |
| c1161 | 12.6 | 0.7 | 19 | 1 | US-08-271-880A-44 | Sequence 44, Appl | 1234 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3129 | Sequence 3129, App |
| c1162 | 12.6 | 0.7 | 19 | 1 | US-08-221-816B-17 | Sequence 17, Appl | 1235 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3185 | Sequence 3185, App |
| c1163 | 12.6 | 0.7 | 19 | 1 | US-08-709-733-12 | Sequence 12, Appl | 1236 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3578 | Sequence 3578, App |
| c1164 | 12.6 | 0.7 | 19 | 1 | US-08-359-705B-22 | Sequence 22, Appl | 1237 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3590 | Sequence 3590, App |
| c1165 | 12.6 | 0.7 | 19 | 1 | US-08-450-905B-131 | Sequence 131, App | 1238 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3644 | Sequence 3644, App |
| c1166 | 12.6 | 0.7 | 19 | 1 | US-07-952-277A-21 | Sequence 21, Appl | 1239 | 12.6 | 0.7 | 19 | 1 | US-09-696-791-3729 | Sequence 3729, App |
| c1167 | 12.6 | 0.7 | 19 | 1 | US-08-286-846A-22 | Sequence 22, Appl | 1240 | 12.6 | 0.7 | 19 | 1 | US-10-109-368-17 | Sequence 17, Appl |
| c1168 | 12.6 | 0.7 | 19 | 1 | US-08-500-860A-10 | Sequence 10, Appl | 1241 | 12.6 | 0.7 | 19 | 1 | PCT-US93-00977-288 | Sequence 288, App |
| c1169 | 12.6 | 0.7 | 19 | 1 | US-08-855-449A-18 | Sequence 18, Appl | 1242 | 12.6 | 0.7 | 19 | 1 | PCT-US93-04863-24 | Sequence 24, Appl |
| c1170 | 12.6 | 0.7 | 19 | 1 | US-08-457-880A-22 | Sequence 22, Appl | 1243 | 12.6 | 0.7 | 20 | 1 | US-09-679-299A-53 | Sequence 53, Appl |
| c1171 | 12.6 | 0.7 | 19 | 1 | US-08-649-991-33 | Sequence 33, Appl | 1244 | 12.6 | 0.7 | 22 | 1 | US-08-232-081B-10 | Sequence 10, Appl |
| c1172 | 12.6 | 0.7 | 19 | 1 | US-08-910-408-44 | Sequence 44, Appl | 1245 | 12.6 | 0.7 | 23 | 1 | US-09-647-344A-3 | Sequence 3, Appl |
| c1173 | 12.6 | 0.7 | 19 | 1 | US-08-444-622A-22 | Sequence 22, Appl | 1246 | 12.4 | 0.7 | 14 | 1 | US-08-985-162-1803 | Sequence 1803, App |
| c1174 | 12.6 | 0.7 | 19 | 1 | US-08-942-562-22 | Sequence 22, Appl | 1247 | 12.4 | 0.7 | 14 | 1 | US-09-230-652-38 | Sequence 38, Appl |
| c1175 | 12.6 | 0.7 | 19 | 1 | US-07-982-759F-131 | Sequence 131, App | 1248 | 12.4 | 0.7 | 14 | 1 | US-09-401-063-1803 | Sequence 1803, App |
| c1176 | 12.6 | 0.7 | 19 | 1 | US-08-573-186-6 | Sequence 6, Appl | 1249 | 12.4 | 0.7 | 15 | 1 | US-08-221-816B-22 | Sequence 22, Appl |
| c1177 | 12.6 | 0.7 | 19 | 1 | US-09-156-923-22 | Sequence 22, Appl | 1250 | 12.4 | 0.7 | 15 | 1 | US-08-590-897A-32 | Sequence 32, Appl |
| c1178 | 12.6 | 0.7 | 19 | 1 | US-09-249-215-44 | Sequence 44, Appl | 1251 | 12.4 | 0.7 | 15 | 1 | US-10-112-547-22 | Sequence 22, Appl |
| c1179 | 12.6 | 0.7 | 19 | 1 | US-09-553-794-2 | Sequence 2, Appl | 1252 | 12.4 | 0.7 | 15 | 1 | US-10-112-241-22 | Sequence 22, Appl |
| c1180 | 12.6 | 0.7 | 19 | 1 | US-09-353-434-14 | Sequence 14, Appl | 1253 | 12.4 | 0.7 | 15 | 1 | US-10-104-611-22 | Sequence 22, Appl |
| c1181 | 12.6 | 0.7 | 19 | 1 | US-07-974-409C-288 | Sequence 4, Appl | 1254 | 12.4 | 0.7 | 15 | 1 | US-10-109-368-22 | Sequence 22, Appl |
| c1182 | 12.6 | 0.7 | 19 | 1 | US-09-546-990-4 | Sequence 4, Appl | 1255 | 12.4 | 0.7 | 16 | 1 | US-08-281-106-43 | Sequence 43, Appl |
| c1183 | 12.6 | 0.7 | 19 | 1 | US-09-545-435-2 | Sequence 2, Appl | 1256 | 12.4 | 0.7 | 16 | 1 | US-09-199-269-43 | Sequence 43, Appl |
| c1184 | 12.6 | 0.7 | 19 | 1 | US-09-614-034-135 | Sequence 135, App | 1257 | 12.4 | 0.7 | 16 | 1 | US-09-371-772B-5851 | Sequence 5851, App |
| c1185 | 12.6 | 0.7 | 19 | 1 | US-09-649-747A-75 | Sequence 75, Appl | 1258 | 12.4 | 0.7 | 17 | 1 | US-08-196-218-27 | Sequence 27, Appl |
| c1186 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-4414 | Sequence 4414, App | 1259 | 12.4 | 0.7 | 17 | 1 | US-08-373-124A-944 | Sequence 944, App |
| c1187 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-5162 | Sequence 5162, App | 1260 | 12.4 | 0.7 | 17 | 1 | US-08-250-740-21 | Sequence 21, Appl |
| c1188 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-5182 | Sequence 5182, App | 1261 | 12.4 | 0.7 | 17 | 1 | US-08-681-953-27 | Sequence 27, Appl |
| c1189 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-6575 | Sequence 6575, App | 1262 | 12.4 | 0.7 | 17 | 1 | US-08-244-468-4 | Sequence 4, Appl |
| c1190 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-6717 | Sequence 6717, App | 1263 | 12.4 | 0.7 | 17 | 1 | US-07-695-472B-27 | Sequence 27, Appl |
| c1191 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-7357 | Sequence 7357, App | 1264 | 12.4 | 0.7 | 17 | 1 | US-08-435-628-944 | Sequence 944, App |
| c1192 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-7573 | Sequence 7573, App | 1265 | 12.4 | 0.7 | 17 | 1 | US-08-698-805-10 | Sequence 10, Appl |
| c1193 | 12.6 | 0.7 | 19 | 1 | US-09-422-978-11512 | Sequence 11512, A | 1266 | 12.4 | 0.7 | 17 | 1 | US-08-933-749-9 | Sequence 9, Appl |
| c1194 | 12.6 | 0.7 | 19 | 1 | US-09-060-299-387 | Sequence 387, App | 1267 | 12.4 | 0.7 | 17 | 1 | US-08-985-162-220 | Sequence 220, App |
| c1195 | 12.6 | 0.7 | 19 | 1 | US-09-060-299-401 | Sequence 401, App | 1268 | 12.4 | 0.7 | 17 | 1 | US-08-985-162-221 | Sequence 221, App |
| c1196 | 12.6 | 0.7 | 19 | 1 | US-09-402-923A-387 | Sequence 387, App | 1269 | 12.4 | 0.7 | 17 | 1 | US-08-913-833-68 | Sequence 68, Appl |
| c1197 | 12.6 | 0.7 | 19 | 1 | US-09-402-923A-401 | Sequence 401, App | 1270 | 12.4 | 0.7 | 17 | 1 | US-08-938-099-43 | Sequence 43, Appl |
| c1198 | 12.6 | 0.7 | 19 | 1 | US-10-112-547-17 | Sequence 17, Appl | 1271 | 12.4 | 0.7 | 17 | 1 | US-08-998-099-52 | Sequence 52, Appl |
| c1199 | 12.6 | 0.7 | 19 | 1 | US-10-112-241-17 | Sequence 17, Appl | 1272 | 12.4 | 0.7 | 17 | 1 | US-09-235-583-9 | Sequence 9, Appl |
| c1200 | 12.6 | 0.7 | 19 | 1 | US-10-104-611-17 | Sequence 17, Appl | 1273 | 12.4 | 0.7 | 17 | 1 | US-09-599-164-9 | Sequence 9, Appl |
| c1201 | 12.6 | 0.7 | 19 | 1 | US-09-672-717-17 | Sequence 17, Appl | 1274 | 12.4 | 0.7 | 17 | 1 | US-09-580-794C-68 | Sequence 68, Appl |

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|------|------|-----|----|---|---------------------|-------------------|-------|------|-----|----|---|----------------------|-------------------|
| 1421 | 12.2 | 0.7 | 17 | 1 | US-08-758-306-825 | Sequence 825, App | c1494 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6747 | Sequence 6747, Ap |
| 1422 | 12.2 | 0.7 | 17 | 1 | US-08-758-306-849 | Sequence 849, App | c1495 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6957 | Sequence 6957, Ap |
| 1423 | 12.2 | 0.7 | 17 | 1 | US-08-435-628-224 | Sequence 224, App | 1496 | 12.2 | 0.7 | 17 | 1 | US-08-465-679-67 | Sequence 67, Appl |
| 1424 | 12.2 | 0.7 | 17 | 1 | US-08-232-620A-1672 | Sequence 1672, Ap | c1497 | 12.2 | 0.7 | 17 | 1 | US-09-476-387-313 | Sequence 313, App |
| 1425 | 12.2 | 0.7 | 17 | 1 | US-08-232-620A-1676 | Sequence 1676, Ap | 1498 | 12.2 | 0.7 | 17 | 1 | US-09-476-387-492 | Sequence 492, App |
| 1426 | 12.2 | 0.7 | 17 | 1 | US-08-232-620A-1770 | Sequence 1770, Ap | c1499 | 12.2 | 0.7 | 17 | 1 | US-09-476-387-573 | Sequence 573, App |
| 1427 | 12.2 | 0.7 | 17 | 1 | US-08-232-620A-1809 | Sequence 1809, Ap | 1500 | 12.2 | 0.7 | 17 | 1 | US-09-476-387-771 | Sequence 771, App |
| 1428 | 12.2 | 0.7 | 17 | 1 | US-08-332-766A-94 | Sequence 94, Appl | 1501 | 12.2 | 0.7 | 17 | 1 | US-09-476-387-849 | Sequence 849, App |
| 1429 | 12.2 | 0.7 | 17 | 1 | US-08-468-819-63 | Sequence 63, Appl | c1502 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-67 | Sequence 67, Appl |
| 1430 | 12.2 | 0.7 | 17 | 1 | US-08-464-276-3 | Sequence 3, Appl | 1503 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-144 | Sequence 144, App |
| 1431 | 12.2 | 0.7 | 17 | 1 | US-08-909-742-3 | Sequence 3, Appl | 1504 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-173 | Sequence 173, App |
| 1432 | 12.2 | 0.7 | 17 | 1 | US-08-909-742-4 | Sequence 4, Appl | 1505 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-174 | Sequence 174, App |
| 1433 | 12.2 | 0.7 | 17 | 1 | US-08-536-150-12 | Sequence 12, Appl | c1506 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-243 | Sequence 243, App |
| 1434 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-67 | Sequence 67, Appl | c1507 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-253 | Sequence 253, App |
| 1435 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-144 | Sequence 144, App | c1508 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-397 | Sequence 397, App |
| 1436 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-173 | Sequence 173, App | c1509 | 12.2 | 0.7 | 17 | 1 | US-09-401-063-514 | Sequence 514, App |
| 1437 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-174 | Sequence 174, App | c1510 | 12.2 | 0.7 | 17 | 1 | US-09-827-998-412 | Sequence 412, App |
| 1438 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-243 | Sequence 243, App | 1511 | 12.2 | 0.7 | 17 | 1 | US-09-827-998-573 | Sequence 573, App |
| 1439 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-253 | Sequence 253, App | 1512 | 12.2 | 0.7 | 17 | 1 | US-09-827-998-655 | Sequence 655, App |
| 1440 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-397 | Sequence 397, App | c1513 | 12.2 | 0.7 | 17 | 1 | US-09-827-998-720 | Sequence 720, App |
| 1441 | 12.2 | 0.7 | 17 | 1 | US-08-985-162-514 | Sequence 514, App | 1514 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-402 | Sequence 402, App |
| 1442 | 12.2 | 0.7 | 17 | 1 | US-08-998-099-47 | Sequence 47, Appl | 1515 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-658 | Sequence 658, App |
| 1443 | 12.2 | 0.7 | 17 | 1 | US-08-998-099-48 | Sequence 48, Appl | 1516 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-659 | Sequence 659, App |
| 1444 | 12.2 | 0.7 | 17 | 1 | US-08-998-099-49 | Sequence 49, Appl | 1517 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-700 | Sequence 700, App |
| 1445 | 12.2 | 0.7 | 17 | 1 | US-09-071-845-1672 | Sequence 1672, Ap | 1518 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-744 | Sequence 744, App |
| 1446 | 12.2 | 0.7 | 17 | 1 | US-09-071-845-1676 | Sequence 1676, Ap | 1519 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-745 | Sequence 745, App |
| 1447 | 12.2 | 0.7 | 17 | 1 | US-09-071-845-1770 | Sequence 1770, Ap | 1520 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-747 | Sequence 747, App |
| 1448 | 12.2 | 0.7 | 17 | 1 | US-09-071-845-1809 | Sequence 1809, Ap | 1521 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-748 | Sequence 748, App |
| 1449 | 12.2 | 0.7 | 17 | 1 | US-08-838-715B-37 | Sequence 37, Appl | c1522 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-948 | Sequence 948, App |
| 1450 | 12.2 | 0.7 | 17 | 1 | US-09-326-135-3 | Sequence 3, Appl | c1523 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-949 | Sequence 949, App |
| 1451 | 12.2 | 0.7 | 17 | 1 | US-09-412-289-3 | Sequence 3, Appl | c1524 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-950 | Sequence 950, App |
| 1452 | 12.2 | 0.7 | 17 | 1 | US-09-412-289-4 | Sequence 4, Appl | c1525 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-1524 | Sequence 1524, Ap |
| 1453 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-2376 | Sequence 2376, Ap | c1526 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-1528 | Sequence 1528, Ap |
| 1454 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-2386 | Sequence 2386, Ap | 1527 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-1886 | Sequence 1886, Ap |
| 1455 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-2742 | Sequence 2742, Ap | c1528 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-1896 | Sequence 1896, Ap |
| 1456 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-3820 | Sequence 3820, Ap | c1529 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2265 | Sequence 2265, Ap |
| 1457 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-3890 | Sequence 3890, Ap | c1530 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2311 | Sequence 2311, Ap |
| 1458 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-4233 | Sequence 4233, Ap | 1531 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2734 | Sequence 2734, Ap |
| 1459 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-4362 | Sequence 4362, Ap | c1532 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2899 | Sequence 2899, Ap |
| 1460 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-5795 | Sequence 5795, Ap | c1533 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2900 | Sequence 2900, Ap |
| 1461 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-7493 | Sequence 7493, Ap | c1534 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-2901 | Sequence 2901, Ap |
| 1462 | 12.2 | 0.7 | 17 | 1 | US-08-584-040-8024 | Sequence 8024, Ap | c1535 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-5874 | Sequence 5874, Ap |
| 1463 | 12.2 | 0.7 | 17 | 1 | US-08-679-645-70 | Sequence 70, Appl | c1536 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6338 | Sequence 6338, Ap |
| 1464 | 12.2 | 0.7 | 17 | 1 | US-08-679-645-153 | Sequence 153, App | c1537 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6379 | Sequence 6379, Ap |
| 1465 | 12.2 | 0.7 | 17 | 1 | US-08-679-645-200 | Sequence 200, App | c1538 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6380 | Sequence 6380, Ap |
| 1466 | 12.2 | 0.7 | 17 | 1 | US-08-673-645-60 | Sequence 60, Appl | c1539 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6381 | Sequence 6381, Ap |
| 1467 | 12.2 | 0.7 | 17 | 1 | US-08-294-312B-67 | Sequence 67, Appl | c1540 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6382 | Sequence 6382, Ap |
| 1468 | 12.2 | 0.7 | 17 | 1 | US-09-235-538-5 | Sequence 5, Appl | 1541 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6405 | Sequence 6405, Ap |
| 1469 | 12.2 | 0.7 | 17 | 1 | US-08-468-024B-67 | Sequence 67, Appl | c1542 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-6793 | Sequence 6793, Ap |
| 1470 | 12.2 | 0.7 | 17 | 1 | US-09-213-383-63 | Sequence 63, Appl | c1543 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-7038 | Sequence 7038, Ap |
| 1471 | 12.2 | 0.7 | 17 | 1 | US-09-474-432B-314 | Sequence 314, App | c1544 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-7052 | Sequence 7052, Ap |
| 1472 | 12.2 | 0.7 | 17 | 1 | US-09-474-432B-493 | Sequence 493, App | 1545 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-7841 | Sequence 7841, Ap |
| 1473 | 12.2 | 0.7 | 17 | 1 | US-09-474-432B-574 | Sequence 574, App | c1546 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8010 | Sequence 8010, Ap |
| 1474 | 12.2 | 0.7 | 17 | 1 | US-09-474-432B-772 | Sequence 772, App | 1547 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8042 | Sequence 8042, Ap |
| 1475 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-850 | Sequence 850, App | 1548 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8043 | Sequence 8043, Ap |
| 1476 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-921 | Sequence 921, App | 1549 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8412 | Sequence 8412, Ap |
| 1477 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-931 | Sequence 931, App | c1550 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8498 | Sequence 8498, Ap |
| 1478 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-1266 | Sequence 1266, Ap | 1551 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8724 | Sequence 8724, Ap |
| 1479 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-1587 | Sequence 1587, Ap | c1552 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-8900 | Sequence 8900, Ap |
| 1480 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-2000 | Sequence 2000, Ap | 1553 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-9075 | Sequence 9075, Ap |
| 1481 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-2129 | Sequence 2129, Ap | 1554 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-9076 | Sequence 9076, Ap |
| 1482 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-2661 | Sequence 2661, Ap | 1555 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-9233 | Sequence 9233, Ap |
| 1483 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-3299 | Sequence 3299, Ap | c1556 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10029 | Sequence 10029, A |
| 1484 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-3807 | Sequence 3807, Ap | c1557 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10096 | Sequence 10096, A |
| 1485 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-4169 | Sequence 4169, Ap | 1558 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10395 | Sequence 10395, A |
| 1486 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-4719 | Sequence 4719, Ap | 1559 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10401 | Sequence 10401, A |
| 1487 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-4793 | Sequence 4793, Ap | 1560 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10402 | Sequence 10402, A |
| 1488 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-4923 | Sequence 4923, Ap | 1561 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10607 | Sequence 10607, A |
| 1489 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-5317 | Sequence 5317, Ap | 1562 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10641 | Sequence 10641, A |
| 1490 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6264 | Sequence 6264, Ap | c1563 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10666 | Sequence 10666, A |
| 1491 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6265 | Sequence 6265, Ap | c1564 | 12.2 | 0.7 | 17 | 1 | US-09-866-108A-10667 | Sequence 10667, A |
| 1492 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6428 | Sequence 6428, Ap | c1565 | 12.2 | 0.7 | 17 | 1 | US-09-404-912-277 | Sequence 277, App |
| 1493 | 12.2 | 0.7 | 17 | 1 | US-09-371-772B-6475 | Sequence 6475, Ap | 1566 | 12.2 | 0.7 | 17 | 1 | US-09-404-912-555 | Sequence 555, App |

| | | | | | | | | | | | | | |
|-------|------|-----|----|---|---------------------|-------------------|-------|------|-----|----|---|---------------------|--------------------|
| c1567 | 12.2 | 0.7 | 18 | 1 | US-07-903-466-9 | Sequence 9, Appli | 1640 | 12.2 | 0.7 | 18 | 1 | US-09-344-300-17 | Sequence 17, Appli |
| 1568 | 12.2 | 0.7 | 18 | 1 | US-08-388-381-36 | Sequence 36, Appl | c1641 | 12.2 | 0.7 | 18 | 1 | US-09-209-525-4 | Sequence 4, Appli |
| c1569 | 12.2 | 0.7 | 18 | 1 | US-08-200-011-1 | Sequence 1, Appli | c1642 | 12.2 | 0.7 | 18 | 1 | US-08-957-351-21 | Sequence 21, Appl |
| c1570 | 12.2 | 0.7 | 18 | 1 | US-08-319-492B-735 | Sequence 735, App | 1643 | 12.2 | 0.7 | 18 | 1 | US-09-522-217-104 | Sequence 104, App |
| 1571 | 12.2 | 0.7 | 18 | 1 | US-08-319-492B-739 | Sequence 739, App | c1644 | 12.2 | 0.7 | 18 | 1 | US-09-496-694B-53 | Sequence 53, Appl |
| 1572 | 12.2 | 0.7 | 18 | 1 | US-08-183-211-3 | Sequence 3, Appli | c1645 | 12.2 | 0.7 | 18 | 1 | US-09-496-694B-93 | Sequence 93, Appl |
| c1573 | 12.2 | 0.7 | 18 | 1 | US-08-183-211-6 | Sequence 6, Appli | c1646 | 12.2 | 0.7 | 18 | 1 | US-08-584-040-8368 | Sequence 8368, Ap |
| c1574 | 12.2 | 0.7 | 18 | 1 | US-08-384-490-10 | Sequence 10, Appl | c1647 | 12.2 | 0.7 | 18 | 1 | US-09-303-069-21 | Sequence 21, Appl |
| 1575 | 12.2 | 0.7 | 18 | 1 | US-08-729-202-3 | Sequence 3, Appli | c1648 | 12.2 | 0.7 | 18 | 1 | US-09-303-069-22 | Sequence 22, Appl |
| c1576 | 12.2 | 0.7 | 18 | 1 | US-08-459-383-10 | Sequence 10, Appl | 1649 | 12.2 | 0.7 | 18 | 1 | US-08-679-645-633 | Sequence 633, App |
| 1577 | 12.2 | 0.7 | 18 | 1 | US-08-896-371-3 | Sequence 3, Appli | 1650 | 12.2 | 0.7 | 18 | 1 | US-08-679-645-1165 | Sequence 1165, Ap |
| c1578 | 12.2 | 0.7 | 18 | 1 | US-08-761-131-3 | Sequence 23, Appl | 1651 | 12.2 | 0.7 | 18 | 1 | US-09-205-995-42 | Sequence 42, Appl |
| 1579 | 12.2 | 0.7 | 18 | 1 | US-08-410-540-23 | Sequence 23, Appl | 1652 | 12.2 | 0.7 | 18 | 1 | US-09-423-744A-10 | Sequence 10, Appl |
| c1580 | 12.2 | 0.7 | 18 | 1 | US-08-800-751-26 | Sequence 26, Appl | 1653 | 12.2 | 0.7 | 18 | 1 | US-09-167-109-117 | Sequence 117, App |
| c1581 | 12.2 | 0.7 | 18 | 1 | US-08-311-4860-1132 | Sequence 1132, Ap | c1654 | 12.2 | 0.7 | 18 | 1 | US-08-882-322-2 | Sequence 2, Appli |
| 1582 | 12.2 | 0.7 | 18 | 1 | US-08-578-709-4 | Sequence 4, Appli | 1655 | 12.2 | 0.7 | 18 | 1 | US-09-387-341-183 | Sequence 183, App |
| 1583 | 12.2 | 0.7 | 18 | 1 | US-08-485-221-20 | Sequence 20, Appl | c1656 | 12.2 | 0.7 | 18 | 1 | US-09-619-103-13 | Sequence 13, Appl |
| c1584 | 12.2 | 0.7 | 18 | 1 | US-08-110-794A-47 | Sequence 47, Appl | c1657 | 12.2 | 0.7 | 18 | 1 | US-09-702-543-7 | Sequence 7, Appli |
| 1585 | 12.2 | 0.7 | 18 | 1 | US-08-392-935-20 | Sequence 20, Appl | 1658 | 12.2 | 0.7 | 18 | 1 | US-09-920-760-39 | Sequence 39, Appl |
| 1586 | 12.2 | 0.7 | 18 | 1 | US-08-117-952-178 | Sequence 178, App | c1659 | 12.2 | 0.7 | 18 | 1 | US-09-920-760-42 | Sequence 42, Appl |
| c1587 | 12.2 | 0.7 | 18 | 1 | US-08-461-990B-30 | Sequence 30, Appl | c1660 | 12.2 | 0.7 | 18 | 1 | US-09-920-760-50 | Sequence 50, Appl |
| c1588 | 12.2 | 0.7 | 18 | 1 | US-08-627-254C-16 | Sequence 16, Appl | 1661 | 12.2 | 0.7 | 18 | 1 | US-09-920-760-63 | Sequence 63, Appl |
| c1589 | 12.2 | 0.7 | 18 | 1 | US-08-404-531B-13 | Sequence 13, Appl | c1662 | 12.2 | 0.7 | 18 | 1 | US-09-077-619-13 | Sequence 13, Appl |
| c1590 | 12.2 | 0.7 | 18 | 1 | US-08-389-926-47 | Sequence 47, Appl | c1663 | 12.2 | 0.7 | 18 | 1 | US-09-077-619-29 | Sequence 29, Appl |
| c1591 | 12.2 | 0.7 | 18 | 1 | US-08-468-551-5 | Sequence 5, Appli | 1664 | 12.2 | 0.7 | 18 | 1 | US-09-342-325C-26 | Sequence 26, Appl |
| c1592 | 12.2 | 0.7 | 18 | 1 | US-08-585-684B-2686 | Sequence 7, Appli | 1665 | 12.2 | 0.7 | 18 | 1 | US-09-500-253B-20 | Sequence 20, Appl |
| c1593 | 12.2 | 0.7 | 18 | 1 | US-08-990-818-26 | Sequence 26, Appl | c1666 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-6083 | Sequence 6083, Ap |
| c1594 | 12.2 | 0.7 | 18 | 1 | US-09-197-378-24 | Sequence 24, Appl | 1667 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-6531 | Sequence 6531, Ap |
| 1595 | 12.2 | 0.7 | 18 | 1 | US-09-161-015-40 | Sequence 40, Appl | 1668 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-6597 | Sequence 6597, Ap |
| 1596 | 12.2 | 0.7 | 18 | 1 | US-09-205-860-35 | Sequence 35, Appl | c1669 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-7233 | Sequence 7233, Ap |
| c1597 | 12.2 | 0.7 | 18 | 1 | US-09-213-768-22 | Sequence 22, Appl | c1670 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-8462 | Sequence 8462, Ap |
| c1598 | 12.2 | 0.7 | 18 | 1 | US-08-696-497B-3 | Sequence 3, Appli | 1671 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-8588 | Sequence 8588, Ap |
| c1600 | 12.2 | 0.7 | 18 | 1 | US-09-106-038A-76 | Sequence 76, Appl | 1672 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-9354 | Sequence 9354, Ap |
| c1601 | 12.2 | 0.7 | 18 | 1 | US-09-205-921-32 | Sequence 32, Appl | 1673 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-9642 | Sequence 9642, Ap |
| c1602 | 12.2 | 0.7 | 18 | 1 | US-09-255-893-47 | Sequence 47, Appl | 1674 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-9692 | Sequence 9692, Ap |
| 1603 | 12.2 | 0.7 | 18 | 1 | US-09-255-911-44 | Sequence 44, Appl | c1675 | 12.2 | 0.7 | 18 | 1 | US-09-422-978-11144 | Sequence 11144, A |
| 1604 | 12.2 | 0.7 | 18 | 1 | US-09-289-376-42 | Sequence 42, Appl | c1676 | 12.2 | 0.7 | 18 | 1 | US-09-254-776B-23 | Sequence 23, Appl |
| c1605 | 12.2 | 0.7 | 18 | 1 | US-09-357-072-17 | Sequence 17, Appl | c1677 | 12.2 | 0.7 | 18 | 1 | US-09-371-772B-4024 | Sequence 4024, Ap |
| 1606 | 12.2 | 0.7 | 18 | 1 | US-09-357-072-36 | Sequence 36, Appl | 1678 | 12.2 | 0.7 | 18 | 1 | US-09-923-245-104 | Sequence 104, App |
| c1607 | 12.2 | 0.7 | 18 | 1 | US-09-161-443-33 | Sequence 33, Appl | c1679 | 12.2 | 0.7 | 18 | 1 | US-09-526-193A-35 | Sequence 35, Appl |
| c1608 | 12.2 | 0.7 | 18 | 1 | US-09-339-964-17 | Sequence 17, Appl | c1680 | 12.2 | 0.7 | 18 | 1 | US-09-907-794A-229 | Sequence 229, App |
| 1609 | 12.2 | 0.7 | 18 | 1 | US-08-665-259-40 | Sequence 40, Appl | c1681 | 12.2 | 0.7 | 18 | 1 | US-09-807-784B-12 | Sequence 12, Appl |
| 1610 | 12.2 | 0.7 | 18 | 1 | US-08-762-500-40 | Sequence 40, Appl | c1682 | 12.2 | 0.7 | 18 | 1 | US-09-905-125A-229 | Sequence 229, App |
| c1611 | 12.2 | 0.7 | 18 | 1 | US-08-476-900A-13 | Sequence 13, Appl | c1683 | 12.2 | 0.7 | 18 | 1 | US-09-619-758-10 | Sequence 10, Appl |
| c1612 | 12.2 | 0.7 | 18 | 1 | US-09-014-065-4 | Sequence 4, Appli | c1684 | 12.2 | 0.7 | 18 | 1 | US-09-647-143-12 | Sequence 12, Appl |
| 1613 | 12.2 | 0.7 | 18 | 1 | US-09-289-377-47 | Sequence 47, Appl | 1685 | 12.2 | 0.7 | 18 | 1 | US-10-295-723-104 | Sequence 104, App |
| c1614 | 12.2 | 0.7 | 18 | 1 | US-08-488-546A-13 | Sequence 13, Appl | c1686 | 12.2 | 0.7 | 18 | 1 | US-09-902-775A-229 | Sequence 229, App |
| 1615 | 12.2 | 0.7 | 18 | 1 | US-09-339-775-8 | Sequence 8, Appli | c1687 | 12.2 | 0.7 | 18 | 1 | US-09-886-607-10 | Sequence 10, Appl |
| 1616 | 12.2 | 0.7 | 18 | 1 | US-09-121-920-19 | Sequence 19, Appl | c1688 | 12.2 | 0.7 | 18 | 1 | US-08-711-628-4 | Sequence 4, Appli |
| 1617 | 12.2 | 0.7 | 18 | 1 | US-08-765-626-36 | Sequence 36, Appl | 1689 | 12.2 | 0.7 | 18 | 1 | US-09-868-451B-7 | Sequence 7, Appli |
| 1618 | 12.2 | 0.7 | 18 | 1 | US-08-897-236-20 | Sequence 20, Appl | c1690 | 12.2 | 0.7 | 18 | 1 | US-10-177-257-7 | Sequence 7, Appli |
| 1619 | 12.2 | 0.7 | 18 | 1 | US-09-143-212-17 | Sequence 17, Appl | c1691 | 12.2 | 0.7 | 18 | 1 | US-09-906-700-229 | Sequence 229, App |
| 1620 | 12.2 | 0.7 | 18 | 1 | US-09-143-212-18 | Sequence 18, Appl | c1692 | 12.2 | 0.7 | 18 | 1 | US-09-864-680A-13 | Sequence 13, Appl |
| 1621 | 12.2 | 0.7 | 18 | 1 | US-09-143-212-45 | Sequence 45, Appl | c1693 | 12.2 | 0.7 | 18 | 1 | US-09-903-603A-229 | Sequence 229, App |
| c1622 | 12.2 | 0.7 | 18 | 1 | US-09-143-212-45 | Sequence 45, Appl | 1694 | 12.2 | 0.7 | 18 | 1 | US-09-544-398B-509 | Sequence 509, App |
| c1623 | 12.2 | 0.7 | 18 | 1 | US-09-163-162-44 | Sequence 44, Appl | 1695 | 12.2 | 0.7 | 18 | 1 | PCT-US92-08094-55 | Sequence 55, Appl |
| 1624 | 12.2 | 0.7 | 18 | 1 | US-09-050-559C-13 | Sequence 13, Appl | c1696 | 12.2 | 0.7 | 18 | 1 | PCT-US93-05794-9 | Sequence 9, Appli |
| 1625 | 12.2 | 0.7 | 18 | 1 | US-09-205-143-61 | Sequence 61, Appl | 1697 | 12.2 | 0.7 | 18 | 1 | PCT-US93-08326-20 | Sequence 20, Appl |
| c1626 | 12.2 | 0.7 | 18 | 1 | US-09-280-409-59 | Sequence 59, Appl | 1698 | 12.2 | 0.7 | 18 | 1 | PCT-US95-00176A-3 | Sequence 3, Appli |
| 1627 | 12.2 | 0.7 | 18 | 1 | US-09-289-466-46 | Sequence 46, Appl | c1699 | 12.2 | 0.7 | 18 | 1 | PCT-US95-00176A-6 | Sequence 6, Appli |
| c1628 | 12.2 | 0.7 | 18 | 1 | US-09-291-837-7 | Sequence 7, Appli | c1700 | 12.2 | 0.7 | 18 | 1 | PCT-US95-08605-36 | Sequence 36, Appl |
| c1629 | 12.2 | 0.7 | 18 | 1 | US-09-286-407-44 | Sequence 44, Appl | c1701 | 12.2 | 0.7 | 18 | 1 | 5187077-9 | Patent No. 5187077 |
| c1630 | 12.2 | 0.7 | 18 | 1 | US-09-474-922A-77 | Sequence 77, Appl | c1702 | 12.2 | 0.7 | 18 | 1 | 5492811-1 | Patent No. 5492811 |
| c1631 | 12.2 | 0.7 | 18 | 1 | US-09-038-073-2686 | Sequence 2686, Ap | 1703 | 12.2 | 0.7 | 19 | 1 | US-09-696-791-321 | Sequence 321, App |
| 1632 | 12.2 | 0.7 | 18 | 1 | US-09-071-433-39 | Sequence 39, Appl | 1704 | 12.2 | 0.7 | 19 | 1 | US-09-696-791-322 | Sequence 322, App |
| c1633 | 12.2 | 0.7 | 18 | 1 | US-09-071-433-64 | Sequence 64, Appl | c1705 | 12 | 0.7 | 12 | 1 | US-08-221-816B-28 | Sequence 28, Appl |
| 1634 | 12.2 | 0.7 | 18 | 1 | US-09-593-323-17 | Sequence 17, Appl | c1706 | 12 | 0.7 | 12 | 1 | US-10-112-547-28 | Sequence 28, Appl |
| 1635 | 12.2 | 0.7 | 18 | 1 | US-09-268-140-40 | Sequence 40, Appl | c1707 | 12 | 0.7 | 12 | 1 | US-10-112-241-28 | Sequence 28, Appl |
| c1636 | 12.2 | 0.7 | 18 | 1 | US-09-268-140-41 | Sequence 41, Appl | c1708 | 12 | 0.7 | 12 | 1 | US-09-874-601-168 | Sequence 168, App |
| 1637 | 12.2 | 0.7 | 18 | 1 | US-09-167-874-20 | Sequence 20, Appl | c1709 | 12 | 0.7 | 12 | 1 | US-10-104-611-28 | Sequence 28, Appl |
| 1638 | 12.2 | 0.7 | 18 | 1 | US-09-172-045-26 | Sequence 26, Appl | c1710 | 12 | 0.7 | 12 | 1 | US-10-109-368-28 | Sequence 28, Appl |
| 1639 | 12.2 | 0.7 | 18 | 1 | US-09-594-108-17 | Sequence 17, Appl | c1711 | 12 | 0.7 | 14 | 1 | US-08-985-162-1813 | Sequence 1813, Ap |
| | | | | | | | c1712 | 12 | 0.7 | 14 | 1 | US-09-401-063-1813 | Sequence 1813, Ap |

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|-------|----|-----|----|---|---------------------|-------------------|-------|------|-----|----|---|---------------------|-------------------|
| c1713 | 12 | 0.7 | 15 | 1 | US-08-311-760A-74 | Sequence 74, Appl | c1786 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9696 | Sequence 9696, Ap |
| c1714 | 12 | 0.7 | 15 | 1 | US-08-319-492B-469 | Sequence 469, App | c1787 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9697 | Sequence 9697, Ap |
| c1715 | 12 | 0.7 | 15 | 1 | US-08-307-682B-23 | Sequence 23, Appl | c1788 | 12 | 0.7 | 17 | 1 | US-09-404-912-144 | Sequence 144, App |
| c1716 | 12 | 0.7 | 15 | 1 | US-08-292-620A-56 | Sequence 56, Appl | c1789 | 12 | 0.7 | 17 | 1 | US-09-579-288-6 | Sequence 6, Appli |
| c1717 | 12 | 0.7 | 15 | 1 | US-08-232-620A-597 | Sequence 597, App | c1790 | 12 | 0.7 | 17 | 1 | US-10-059-877-5 | Sequence 5, Appli |
| c1718 | 12 | 0.7 | 15 | 1 | US-08-585-684B-783 | Sequence 783, App | c1791 | 12 | 0.7 | 17 | 1 | US-10-059-877-6 | Sequence 6, Appli |
| c1719 | 12 | 0.7 | 15 | 1 | US-08-774-310-74 | Sequence 74, Appl | c1792 | 12 | 0.7 | 17 | 1 | US-07-971-096-16 | Sequence 16, Appl |
| c1720 | 12 | 0.7 | 15 | 1 | US-09-071-845-56 | Sequence 56, Appl | c1793 | 12 | 0.7 | 18 | 1 | US-08-319-492B-747 | Sequence 747, App |
| c1721 | 12 | 0.7 | 15 | 1 | US-09-071-845-597 | Sequence 597, App | c1794 | 12 | 0.7 | 18 | 1 | US-08-175-096-16 | Sequence 16, Appl |
| c1722 | 12 | 0.7 | 15 | 1 | US-09-038-073-783 | Sequence 783, App | c1795 | 12 | 0.7 | 18 | 1 | US-08-363-240A-1234 | Sequence 1234, Ap |
| c1723 | 12 | 0.7 | 15 | 1 | US-09-813-781-49 | Sequence 49, Appl | c1796 | 12 | 0.7 | 18 | 1 | US-08-593-031-1 | Sequence 1, Appli |
| c1724 | 12 | 0.7 | 15 | 1 | US-08-719-593-6 | Sequence 6, Appli | c1797 | 12 | 0.7 | 18 | 1 | US-08-424-663-6 | Sequence 6, Appli |
| c1725 | 12 | 0.7 | 16 | 1 | US-08-292-620A-1621 | Sequence 1621, Ap | c1798 | 12 | 0.7 | 18 | 1 | US-08-525-849C-17 | Sequence 17, Appl |
| c1726 | 12 | 0.7 | 16 | 1 | US-08-770-335A-68 | Sequence 68, Appl | c1799 | 12 | 0.7 | 18 | 1 | US-08-749-495A-17 | Sequence 17, Appl |
| c1727 | 12 | 0.7 | 16 | 1 | US-09-071-845-1621 | Sequence 1621, Ap | c1800 | 12 | 0.7 | 18 | 1 | US-08-872-446-6 | Sequence 6, Appli |
| c1728 | 12 | 0.7 | 16 | 1 | US-09-371-772B-6101 | Sequence 6101, Ap | c1801 | 12 | 0.7 | 18 | 1 | US-08-872-446-10 | Sequence 10, Appl |
| c1729 | 12 | 0.7 | 16 | 1 | US-09-371-772B-7117 | Sequence 7117, Ap | c1802 | 12 | 0.7 | 18 | 1 | US-09-205-921-22 | Sequence 22, Appl |
| c1730 | 12 | 0.7 | 16 | 1 | US-08-373-124A-2475 | Sequence 2475, Ap | c1803 | 12 | 0.7 | 18 | 1 | US-09-169-078-17 | Sequence 17, Appl |
| c1731 | 12 | 0.7 | 17 | 1 | US-08-435-628-2475 | Sequence 2475, Ap | c1804 | 12 | 0.7 | 18 | 1 | US-08-945-654-5 | Sequence 5, Appli |
| c1732 | 12 | 0.7 | 17 | 1 | US-08-856-141-5 | Sequence 5, Appli | c1805 | 12 | 0.7 | 18 | 1 | US-09-344-521-9 | Sequence 9, Appli |
| c1733 | 12 | 0.7 | 17 | 1 | US-08-856-141-6 | Sequence 6, Appli | c1806 | 12 | 0.7 | 18 | 1 | US-09-169-248-17 | Sequence 17, Appl |
| c1734 | 12 | 0.7 | 17 | 1 | US-08-181-664-21 | Sequence 21, Appl | c1807 | 12 | 0.7 | 18 | 1 | US-09-960-780-110 | Sequence 110, App |
| c1735 | 12 | 0.7 | 17 | 1 | US-08-985-162-279 | Sequence 279, App | c1808 | 12 | 0.7 | 18 | 1 | US-08-960-780-134 | Sequence 134, App |
| c1736 | 12 | 0.7 | 17 | 1 | US-08-985-162-645 | Sequence 645, App | c1809 | 12 | 0.7 | 18 | 1 | US-08-991-789A-128 | Sequence 128, App |
| c1737 | 12 | 0.7 | 17 | 1 | US-08-985-162-646 | Sequence 646, App | c1810 | 12 | 0.7 | 18 | 1 | US-09-073-898-110 | Sequence 110, App |
| c1738 | 12 | 0.7 | 17 | 1 | US-08-985-162-647 | Sequence 647, App | c1811 | 12 | 0.7 | 18 | 1 | US-09-073-898-134 | Sequence 134, App |
| c1739 | 12 | 0.7 | 17 | 1 | US-08-864-641B-7 | Sequence 7, Appli | c1812 | 12 | 0.7 | 18 | 1 | US-09-256-340-2 | Sequence 2, Appli |
| c1740 | 12 | 0.7 | 17 | 1 | US-08-584-040-2840 | Sequence 2840, Ap | c1813 | 12 | 0.7 | 18 | 1 | US-09-256-340-3 | Sequence 3, Appli |
| c1741 | 12 | 0.7 | 17 | 1 | US-08-584-040-2841 | Sequence 2841, Ap | c1814 | 12 | 0.7 | 18 | 1 | US-09-280-270A-6 | Sequence 6, Appli |
| c1742 | 12 | 0.7 | 17 | 1 | US-08-584-040-4303 | Sequence 4303, Ap | c1815 | 12 | 0.7 | 18 | 1 | US-09-280-270A-10 | Sequence 10, Appl |
| c1743 | 12 | 0.7 | 17 | 1 | US-08-584-040-5862 | Sequence 5862, Ap | c1816 | 12 | 0.7 | 18 | 1 | US-09-813-378-2 | Sequence 2, Appli |
| c1744 | 12 | 0.7 | 17 | 1 | US-09-495-140-5 | Sequence 5, Appli | c1817 | 12 | 0.7 | 18 | 1 | US-09-813-378-3 | Sequence 3, Appli |
| c1745 | 12 | 0.7 | 17 | 1 | US-09-495-140-6 | Sequence 6, Appli | c1818 | 12 | 0.7 | 18 | 1 | US-09-062-451-128 | Sequence 128, App |
| c1746 | 12 | 0.7 | 17 | 1 | US-09-328-174A-30 | Sequence 30, Appl | c1819 | 12 | 0.7 | 18 | 1 | US-08-584-040-3075 | Sequence 3075, Ap |
| c1747 | 12 | 0.7 | 17 | 1 | US-09-832-382-7 | Sequence 7, Appli | c1820 | 12 | 0.7 | 18 | 1 | US-09-205-995-16 | Sequence 16, Appl |
| c1748 | 12 | 0.7 | 17 | 1 | US-09-374-712A-7 | Sequence 7, Appli | c1821 | 12 | 0.7 | 18 | 1 | US-09-598-326-128 | Sequence 128, App |
| c1749 | 12 | 0.7 | 17 | 1 | US-09-371-772B-1364 | Sequence 1364, Ap | c1822 | 12 | 0.7 | 18 | 1 | US-10-010-717-2 | Sequence 2, Appli |
| c1750 | 12 | 0.7 | 17 | 1 | US-09-371-772B-1365 | Sequence 1365, Ap | c1823 | 12 | 0.7 | 18 | 1 | US-10-010-717-3 | Sequence 3, Appli |
| c1751 | 12 | 0.7 | 17 | 1 | US-09-371-772B-2070 | Sequence 2070, Ap | c1824 | 12 | 0.7 | 18 | 1 | US-09-422-978-4609 | Sequence 4609, Ap |
| c1752 | 12 | 0.7 | 17 | 1 | US-09-371-772B-2719 | Sequence 2719, Ap | c1825 | 12 | 0.7 | 18 | 1 | US-09-422-978-11660 | Sequence 11660, A |
| c1753 | 12 | 0.7 | 17 | 1 | US-09-371-772B-5607 | Sequence 5607, Ap | c1826 | 12 | 0.7 | 18 | 1 | US-09-371-772B-1502 | Sequence 1502, Ap |
| c1754 | 12 | 0.7 | 17 | 1 | US-09-371-772B-5608 | Sequence 5608, Ap | c1827 | 12 | 0.7 | 18 | 1 | US-09-289-198-128 | Sequence 128, App |
| c1755 | 12 | 0.7 | 17 | 1 | US-09-371-772B-6705 | Sequence 6705, Ap | c1828 | 12 | 0.7 | 18 | 1 | US-09-429-755-128 | Sequence 128, App |
| c1756 | 12 | 0.7 | 17 | 1 | US-09-371-772B-6816 | Sequence 6816, Ap | c1829 | 12 | 0.7 | 18 | 1 | US-09-850-351A-110 | Sequence 110, App |
| c1757 | 12 | 0.7 | 17 | 1 | US-09-401-063-279 | Sequence 279, App | c1830 | 12 | 0.7 | 18 | 1 | US-09-850-351A-134 | Sequence 134, App |
| c1758 | 12 | 0.7 | 17 | 1 | US-09-401-063-645 | Sequence 645, App | c1831 | 12 | 0.7 | 21 | 1 | US-08-875-573-10 | Sequence 10, Appl |
| c1759 | 12 | 0.7 | 17 | 1 | US-09-401-063-646 | Sequence 646, App | c1832 | 11.8 | 0.7 | 16 | 1 | US-08-719-593-6 | Sequence 6, Appli |
| c1760 | 12 | 0.7 | 17 | 1 | US-09-401-063-647 | Sequence 647, App | c1833 | 11.8 | 0.7 | 17 | 1 | US-08-584-040-4222 | Sequence 4222, Ap |
| c1761 | 12 | 0.7 | 17 | 1 | US-09-827-998-539 | Sequence 539, App | c1834 | 11.8 | 0.7 | 17 | 1 | US-09-371-772B-1989 | Sequence 1989, Ap |
| c1762 | 12 | 0.7 | 17 | 1 | US-09-866-108A-171 | Sequence 171, App | c1835 | 11.8 | 0.7 | 17 | 1 | US-09-235-538-5 | Sequence 5, Appli |
| c1763 | 12 | 0.7 | 17 | 1 | US-09-866-108A-172 | Sequence 172, App | c1836 | 11.8 | 0.7 | 17 | 1 | US-09-866-108A-8498 | Sequence 8498, Ap |
| c1764 | 12 | 0.7 | 17 | 1 | US-09-866-108A-173 | Sequence 173, App | c1837 | 11.8 | 0.7 | 17 | 1 | US-09-866-108A-8724 | Sequence 8724, Ap |
| c1765 | 12 | 0.7 | 17 | 1 | US-09-866-108A-174 | Sequence 174, App | c1838 | 11.8 | 0.7 | 18 | 1 | US-09-256-496-9 | Sequence 9, Appli |
| c1766 | 12 | 0.7 | 17 | 1 | US-09-866-108A-175 | Sequence 175, App | c1839 | 11.8 | 0.7 | 18 | 1 | US-08-485-721-20 | Sequence 20, Appl |
| c1767 | 12 | 0.7 | 17 | 1 | US-09-866-108A-176 | Sequence 176, App | c1840 | 11.8 | 0.7 | 18 | 1 | US-08-392-935-20 | Sequence 20, Appl |
| c1768 | 12 | 0.7 | 17 | 1 | US-09-866-108A-177 | Sequence 177, App | c1841 | 11.8 | 0.7 | 18 | 1 | US-08-897-236-20 | Sequence 20, Appl |
| c1769 | 12 | 0.7 | 17 | 1 | US-09-866-108A-521 | Sequence 521, App | c1842 | 11.8 | 0.7 | 18 | 1 | US-09-167-874-20 | Sequence 20, Appl |
| c1770 | 12 | 0.7 | 17 | 1 | US-09-866-108A-522 | Sequence 522, App | c1843 | 11.8 | 0.7 | 18 | 1 | US-09-500-253B-20 | Sequence 20, Appl |
| c1771 | 12 | 0.7 | 17 | 1 | US-09-866-108A-1652 | Sequence 1652, Ap | c1844 | 11.8 | 0.7 | 18 | 1 | PCT-US93-08326-20 | Sequence 20, Appl |
| c1772 | 12 | 0.7 | 17 | 1 | US-09-866-108A-1653 | Sequence 1653, Ap | | | | | | | |
| c1773 | 12 | 0.7 | 17 | 1 | US-09-866-108A-1654 | Sequence 1654, Ap | | | | | | | |
| c1774 | 12 | 0.7 | 17 | 1 | US-09-866-108A-1655 | Sequence 1655, Ap | | | | | | | |
| c1775 | 12 | 0.7 | 17 | 1 | US-09-866-108A-1657 | Sequence 1657, Ap | | | | | | | |
| c1776 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8423 | Sequence 8423, Ap | | | | | | | |
| c1777 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8424 | Sequence 8424, Ap | | | | | | | |
| c1778 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8425 | Sequence 8425, Ap | | | | | | | |
| c1779 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8426 | Sequence 8426, Ap | | | | | | | |
| c1780 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8427 | Sequence 8427, Ap | | | | | | | |
| c1781 | 12 | 0.7 | 17 | 1 | US-09-866-108A-8428 | Sequence 8428, Ap | | | | | | | |
| c1782 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9692 | Sequence 9692, Ap | | | | | | | |
| c1783 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9693 | Sequence 9693, Ap | | | | | | | |
| c1784 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9694 | Sequence 9694, Ap | | | | | | | |
| c1785 | 12 | 0.7 | 17 | 1 | US-09-866-108A-9695 | Sequence 9695, Ap | | | | | | | |

ALIGNMENTS

RESULT 1

US-09-696-791-464
; Sequence 464, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Rottiz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES

FILE REFERENCE: 480124.407
CURRENT APPLICATION NUMBER: US/09/696,791
CURRENT FILING DATE: 2000-10-25
NUMBER OF SEQ ID NOS: 4523
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 464
LENGTH: 19
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: Cdk4 ribozyme binding site
US-09-696-791-464

Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTGGCCTGGC 1046
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DB 1 TGGCTGACTTGGCCTGGC 19

RESULT 2
US-09-696-791-465
Sequence 465, Application US/09696791
Patent No. 6770633
GENERAL INFORMATION:
APPLICANT: Robbins, Joan M.
TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
DISEASES
FILE REFERENCE: 480124.407
CURRENT APPLICATION NUMBER: US/09/696,791
CURRENT FILING DATE: 2000-10-25
NUMBER OF SEQ ID NOS: 4523
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 465
LENGTH: 19
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: Cdk4 ribozyme binding site
US-09-696-791-465

Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1029 GGCTGACTTGGCCTGGCC 1047
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DB 1 GGCTGACTTGGCCTGGCC 19

RESULT 3
US-09-866-108A-15295
Sequence 15295, Application US/09866108A
Patent No. 6686188
GENERAL INFORMATION:
APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharron G.
APPLICANT: HANZEL, David K.
APPLICANT: RANK, David R.
APPLICANT: CHEN, Wensheng
APPLICANT: SHANNON, Mark
TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
FILE REFERENCE: AEOMICA-7
CURRENT APPLICATION NUMBER: US/09/866,108A
CURRENT FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04

PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 15755
SOFTWARE: Aeomica Sequence Listing Engine
Patent No. 6686188
SEQ ID NO 15295
LENGTH: 25
TYPE: DNA
ORGANISM: Homo sapiens
US-09-866-108A-15295
Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 37;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCCCGCCTCCGTCGTCGTC 579
|||||
DB 1 CCTCAGCCCGCCTCCGTCGTCGTC 25
RESULT 4
US-08-678-039A-3
Sequence 3, Application US/08678039A
Patent No. 5858662
GENERAL INFORMATION:
APPLICANT: Keating, Mark T.
APPLICANT: Morris, Colleen A.
TITLE OF INVENTION: Diagnosis of Williams Syndrome and
Williams Syndrome Cognitive Profile by Analysis of the
TITLE OF INVENTION: Presence or Absence of a LIM-Kinase Gene
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rothwell, Figg, Ernst & Kurz, P.C.
STREET: 555 Thirteenth Street, N.W., Suite 701 East
CITY: Washington
STATE: DC
COUNTRY: U.S.A.
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/678,039A
FILING DATE: 10-JUL-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Saxe, Stephen A.
REGISTRATION NUMBER: 38,609
REFERENCE/DOCKET NUMBER: 2323-120A
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-624-1589
TELEFAX: 202-783-6031
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 base pairs

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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "Primer sequence"
US-08-678-039A-3
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Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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QY 1033 GACTTTGGCTGGCGCGAGCCAAG 1056
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Db 1 GACTTTGGCTGGCTCGAGACATG 24
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RESULT 5

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US-09-866-108A-15294
; Sequence 15294, Application US/09866108A
; Patent No. 6686188
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; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
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; APPLICANT: JI, Yonggang
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; APPLICANT: PENN, Sharron G.
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; APPLICANT: HANZEL, David K.
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; APPLICANT: RANK, David R.
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; APPLICANT: CHEN, Wensheng
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; APPLICANT: SHANNON, Mark
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; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; CURRENT APPLICATION NUMBER: US/09/866,108A
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; CURRENT FILING DATE: 2001-05-25
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; PRIOR APPLICATION NUMBER: US 60/207,456
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; PRIOR FILING DATE: 2000-05-26
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; PRIOR FILING DATE: 2000-10-04
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; PRIOR FILING DATE: 2000-09-27
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; Sequence 15296, Application US/09866108A
; Patent No. 6686188
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; GENERAL INFORMATION:
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; APPLICANT: GU, Yizhong
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; APPLICANT: JI, Yonggang
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; APPLICANT: PENN, Sharron G.
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; APPLICANT: HANZEL, David K.
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; APPLICANT: RANK, David R.
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; APPLICANT: CHEN, Wensheng
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; APPLICANT: SHANNON, Mark
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```
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
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; FILE REFERENCE: AECOMICA-7
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; CURRENT APPLICATION NUMBER: US/09/866,108A
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; CURRENT FILING DATE: 2001-05-25
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; PRIOR APPLICATION NUMBER: US 60/207,456
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; PRIOR FILING DATE: 2000-05-26
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; PRIOR FILING DATE: 2000-10-04
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; PRIOR FILING DATE: 2000-09-27
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Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 826 TCCCTCACCCTGCTTTGAGTAC 849
Db 25 TCTGTACCCCTGCTTTGAGTGC 2

RESULT 10
US-09-696-791-343
; Sequence 343, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 343
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-343

Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 45;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAATGAG 19

RESULT 11
US-09-696-791-347
; Sequence 347, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 347
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-347

Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 45;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1028 TGGCTGACTTTGGCCTGCG 1046
Db 1 TGGCTGACTTCGCGCTGCG 19

RESULT 12
US-08-910-629A-31/c
; Sequence 31, Application US/08910629A
; Patent No. 5877309
```

```
; GENERAL INFORMATION:
; APPLICANT: Robert A. McKay
; APPLICANT: Nicholas M. Dean
; APPLICANT: Brett Monia
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE MODULATION OF JNK
; TITLE OF INVENTION: PROTEINS
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Law Offices of Jane Massey Licata
; STREET: 66 East Main Street
; CITY: Marlton
; STATE: NJ
; COUNTRY: USA
; ZIP: 08053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
; MEDIUM TYPE: STORAGE
; COMPUTER: PENTIUM
; OPERATING SYSTEM: WINDOWS 95
; SOFTWARE: WORDPERFECT 6.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/910,629A
; FILING DATE: August 13, 1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISPH-0215
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (609) 779-2400
; TELEFAX: (609) 779-8488
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: Yes
US-08-910-629A-31

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1033 GACTTTGCCCTGGCCCG 1049
Db 20 GACTTTGCCCTGGCCCG 4

RESULT 13
US-08-910-629A-42
; Sequence 42, Application US/08910629A
; Patent No. 5877309
; GENERAL INFORMATION:
; APPLICANT: Robert A. McKay
; APPLICANT: Nicholas M. Dean
; APPLICANT: Brett Monia
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE MODULATION OF JNK
; TITLE OF INVENTION: PROTEINS
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Law Offices of Jane Massey Licata
; STREET: 66 East Main Street
; CITY: Marlton
; STATE: NJ
; COUNTRY: USA
; ZIP: 08053
; COMPUTER READABLE FORM:
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MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
MEDIUM TYPE: STORAGE
COMPUTER: PENTIUM
OPERATING SYSTEM: WINDOWS 95
SOFTWARE: WORDPERFECT 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,629A
FILING DATE: August 13, 1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Jane Massey Licata
REGISTRATION NUMBER: 32,257
REFERENCE/DOCKET NUMBER: ISPH-0215
TELECOMMUNICATION INFORMATION:
TELEPHONE: (609) 779-2400
TELEFAX: (609) 779-8488
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 20
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
ANTI-SENSE: No
US-08-910-629A-42

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
DB 1 GACTTTGGCCTGGCCCG 17

RESULT 14
US-09-209-668-7/c
Sequence 7, Application US/09209668A
Patent No. 6114517
GENERAL INFORMATION:
APPLICANT: Monia, Brett P.
APPLICANT: Xu, Xiaoxing S.
TITLE OF INVENTION: METHODS OF MODULATING TUMOR NECROSIS FACTOR
TITLE OF INVENTION: alpha-INDUCED EXPRESSION OF CELL ADHESION MOLECULES
FILE REFERENCE: ISPH-0336
CURRENT APPLICATION NUMBER: US/09/209,668A
CURRENT FILING DATE: 1998-12-10
NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 7
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: antisense sequence
US-09-209-668-7

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
DB 20 GACTTTGGCCTGGCCCG 4

RESULT 15
US-09-287-796-31/c
Sequence 31, Application US/09287796A
Patent No. 6133246
GENERAL INFORMATION:

APPLICANT: McKay, Robert A.
APPLICANT: Dean, Nicholas M.
APPLICANT: Monia, Brett
APPLICANT: Nero, Pam
APPLICANT: Gaarde, William A.
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
FILE REFERENCE: ISPH-0350
CURRENT APPLICATION NUMBER: US/09/287,796A
CURRENT FILING DATE: 1999-04-07
EARLIER APPLICATION NUMBER: 09/130,616
EARLIER FILING DATE: 1998-08-07
EARLIER APPLICATION NUMBER: 08/910,629
EARLIER FILING DATE: 1997-08-03
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 31
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Sequence
US-09-287-796-31

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
DB 20 GACTTTGGCCTGGCCCG 4

RESULT 16
US-09-287-796-42
Sequence 42, Application US/09287796A
Patent No. 6133246
GENERAL INFORMATION:
APPLICANT: McKay, Robert A.
APPLICANT: Dean, Nicholas M.
APPLICANT: Monia, Brett
APPLICANT: Nero, Pam
APPLICANT: Gaarde, William A.
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
FILE REFERENCE: ISPH-0350
CURRENT APPLICATION NUMBER: US/09/287,796A
CURRENT FILING DATE: 1999-04-07
EARLIER APPLICATION NUMBER: 09/130,616
EARLIER FILING DATE: 1998-08-07
EARLIER APPLICATION NUMBER: 08/910,629
EARLIER FILING DATE: 1997-08-03
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 42
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Sequence
US-09-287-796-42

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
DB 1 GACTTTGGCCTGGCCCG 17

RESULT 17
US-09-130-616-31/c
Sequence 31, Application US/09130616C
Patent No. 6221850

Tue Nov 2 13:39:13 2004

```

; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 73
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-300-958A-73

```

```

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 96;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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QY 531 CAATAGCCCCATCTTTGACAAAGCCC 555
Db 25 CACTAGCAGCATCTTTGAAAAAGCAC 1

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RESULT 20

```

US-08-538-666-11/c
; Sequence 11, Application US/08538666
; Patent No. 6103465
; GENERAL INFORMATION:
; APPLICANT: Leslie Johnston-Dow, Robert B. Chadwick, Peter Parham
; TITLE OF INVENTION: Method and reagents for typing HLA class I genes
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Paul D. Grossman, Perkin-Elmer Corp., Applied Biosystems Division
; STREET: 850 Lincoln Centre Drive
; CITY: Foster City
; STATE: California
; COUNTRY: USA
; ZIP: 94404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 3.10/DOS 6.20
; SOFTWARE: Microsoft Word for Windows, vers. 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/538,666
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul D. Grossman
; REGISTRATION NUMBER: 36,537
; REFERENCE/DOCKET NUMBER: 4259C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 638-5846
; TELEFAX: (415) 638-6071
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-538-666-11

```

```

; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-31

```

```

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

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QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4

```

RESULT 18

```

US-09-130-616-42
; Sequence 42, Application US/09130616C
; Patent No. 6221850
; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-42

```

```

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1033 GACTTTGGCCTGGCCCG 1049
Db 1 GACTTTGGCCTGGCCCG 17

```

RESULT 19

```

US-09-300-958A-73/c
; Sequence 73, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John

```

```
Query Match
Best Local Similarity 1.0%; Score 16.8; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTGA 371
Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 21
US-08-538-666-17/c
; Sequence 17, Application US/08538666
; Patent No. 6103465
; GENERAL INFORMATION:
; APPLICANT: Leslie Johnston-Dow, Robert B. Chadwick, Peter Partham
; TITLE OF INVENTION: Method and reagents for typing HLA class I genes
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Paul D. Grossman, Perkin-Elmer Corp., Applied Biosystems Division
; STREET: 850 Lincoln Centre Drive
; CITY: Foster City
; STATE: California
; COUNTRY: USA
; ZIP: 94404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 3.10/DOS 6.20
; SOFTWARE: Microsoft Word for Windows, vers. 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/538,666
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul D. Grossman
; REGISTRATION NUMBER: 36,537
; REFERENCE/DOCKET NUMBER: 4259C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 638-5846
; TELEFAX: (415) 638-6071
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-538-666-17

Query Match
Best Local Similarity 1.0%; Score 16.8; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTGA 371
Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 22
US-09-657-472-2176
; Sequence 2176, Application US/09657472
; Patent No. 6727063
; GENERAL INFORMATION:
; APPLICANT: Lander, Eric S.
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; APPLICANT: Bolk, Stacey
; APPLICANT: Daley, George Q.
; APPLICANT: McCarthy, Jeanette J.
; TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHISMS IN GENES
; FILE REFERENCE: 2825.1027-001
```

```
; CURRENT APPLICATION NUMBER: US/09/657,472
; CURRENT FILING DATE: 2000-09-07
; PRIOR APPLICATION NUMBER: US 60/153,357
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/220,947
; PRIOR FILING DATE: 2000-07-26
; PRIOR APPLICATION NUMBER: US 60/225,724
; PRIOR FILING DATE: 2000-08-16
; NUMBER OF SEQ ID NOS: 2551
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2176
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-657-472-2176

Query Match
Best Local Similarity 1.0%; Score 16.6; DB 1; Length 21;
Matches 16; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 715 CTGGAACATGAGAGGG 731
Db 4 CTGGAACRTGAGAGGG 20

RESULT 23
US-08-785-247-21
; Sequence 21, Application US/08785247
; Patent No. 6040149
; GENERAL INFORMATION:
; APPLICANT: Kolesnick, Richard N.
; APPLICANT: Liu, Jun
; APPLICANT: Zhang, Yuhua
; TITLE OF INVENTION: ASSAY FOR IDENTIFYING AGENTS WHICH ACT ON THE
; TITLE OF INVENTION: CERAMIDE-ACTIVATED PROTEIN KINASE, KINASE
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/785,247
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 48582-A/JPW/CCA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-381-0526
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-785-247-21

Query Match
Best Local Similarity 1.0%; Score 16.6; DB 1; Length 24;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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Tue Nov 2 13:39:13 2004

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; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDHMORF-8
; CURRENT APPLICATION NUMBER: US 09/827,998
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1392
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1392

Query Match      1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1619 CAGACCGAGGCCCGCAGGCGAG 1641
Db      2 CAGATCAAGGCCTCAGCAGGCTG 24

RESULT 24
US-09-347-114A-109/c
; Sequence 109, Application US/09347114A
; Patent No. 6297014
; GENERAL INFORMATION:
; APPLICANT: Kent D. Taylor (Inventor)
; APPLICANT: Maren T. Scheuner (Inventor)
; APPLICANT: Jerome I. Rottier (Inventor)
; APPLICANT: Huiying Yang (Inventor)
; TITLE OF INVENTION: Genetic Test to Determine
; TITLE OF INVENTION: No. 6297014-responsiveness to Statin Drug Treatment
; FILE REFERENCE: P07 41878
; CURRENT APPLICATION NUMBER: US/09/347,114A
; CURRENT FILING DATE: 1999-07-02
; NUMBER OF SEQ ID NOS: 110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 109
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-347-114A-109

Query Match      1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      848 ACCTGGACAAGGACCTGAAGCAG 870
Db      23 ACCTGGACAAGGACCTGAAGCAG 1

RESULT 25
US-09-827-998-1391
; Sequence 1391, Application US/09827998
; Patent No. 6656700
; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL
; FILE REFERENCE: MDHMORF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1391
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1391

Query Match      1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1005 CACGAGAGGGGAGAGCTCAAGC 1027
Db      3 CAGCAAGAGGAGAGAGGCTCAAGC 25

RESULT 26
US-09-827-998-1392
; Sequence 1392, Application US/09827998
; Patent No. 6656700

```

```

; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDHMORF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1392
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1392

Query Match      1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1005 CACGAGAGGGGAGAGCTCAAGC 1027
Db      2 CAGCAAGAGGAGAGAGGCTCAAGC 24

RESULT 27
US-09-827-998-1393
; Sequence 1393, Application US/09827998
; Patent No. 6656700
; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; TITLE OF INVENTION: NOVEL
; FILE REFERENCE: MDHMORF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 1393
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-1393

Query Match      1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1005 CACGAGAGGGGAGAGCTCAAGC 1027
Db      1 CAGCAAGAGGAGAGAGGCTCAAGC 23

RESULT 28
US-09-866-108A-15293
; Sequence 15293, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
; APPLICANT: JI, Yonggang
; APPLICANT: PENN, Sharon G.
; APPLICANT: HANZEL, David K.
; APPLICANT: RANK, David R.
; APPLICANT: CHEN, Wensheng

```

```
; APPLICANT: SHANNON, Mark
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; FILE REFERENCE: AEOICA-7
; CURRENT APPLICATION NUMBER: US/09/866,108A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 15755
; SOFTWARE: Aeoica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 15293
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-866-108A-15293

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 555 CCTCAGCCGCGCCCTCCGTCGTG 577
Db 3 CCTCATCTCCGGCTCCATCGTG 25

RESULT 29
US-09-866-108A-15297
; Sequence 15297, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
; APPLICANT: JI, Yonggang
; APPLICANT: PENN, Sharron G.
; APPLICANT: HANZEL, David K.
; APPLICANT: RANK, David R.
; APPLICANT: CHEN, Wensheng
; APPLICANT: SHANNON, Mark
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; FILE REFERENCE: AEOICA-7
; CURRENT APPLICATION NUMBER: US/09/866,108A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
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; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 15755
; SOFTWARE: Aeoica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 15297
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-866-108A-15297

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 557 TCAGCCGCGCCCTCCGTCGTGTC 579
Db 1 TCATCTCCGGCTCCATCGTGTC 23

RESULT 30
US-08-951-923-51/c
; Sequence 51, Application US/08951923
; Patent No. 6048693
; GENERAL INFORMATION:
; APPLICANT: Bitter, Grant
; TITLE OF INVENTION: PHENOTYPIC ASSAYS OF CYCLIN/CYCLIN-DEPENDENT KINASE
; TITLE OF INVENTION: FUNCTION
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Cooley Godward LLP
; STREET: 5 Palo Alto Square, 3000 El Camino Real
; CITY: Palo Alto
; STATE: CA
; COUNTRY: US
; ZIP: 94306-2155
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/951,923
; FILING DATE: October 16, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Neeley, Richard L.
; REGISTRATION NUMBER: 30,092
; REFERENCE/DOCKET NUMBER: BITT-001/02US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650 843-5000
; TELEFAX: 650 857-0663
; TELEX: 380816COOLEYPA
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18
; TYPE: nucleic acid
; STRANDEDNESS: single stranded
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; US-08-951-923-51

Query Match 0.9%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 74;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

QY 1033 GACTTGGCTGGCCCA 1050
Db 18 GACTTGGCTGGCCAGA 1

RESULT 31
US-09-696-791-348
; Sequence 348, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 348
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-348

Query Match 0.9%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 82;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1029 GGCTGACTTGGCTGGC 1046
Db 1 GGCTGACTTGGCTGGC 18

RESULT 32
US-08-863-639A-48/c
; Sequence 48, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-48

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCAGTG 250
Db 21 GTGGTGGTGGTGGTGGTG 1

RESULT 33
US-08-863-639A-76
; Sequence 76, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 76:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-76

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCAGTG 250
Db 1 GTGGTGGTGGTGGTGGTG 21

RESULT 34
US-09-726-774-65
; Sequence 65, Application US/09726774
; Patent No. 6677153
; GENERAL INFORMATION:

QY 1033 GACTTGGCTGGCCCA 1050
Db 18 GACTTGGCTGGCCAGA 1

RESULT 31
US-09-696-791-348
; Sequence 348, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 348
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk3 ribozyme binding site
US-09-696-791-348

Query Match 0.9%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 82;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1029 GGCTGACTTGGCTGGC 1046
Db 1 GGCTGACTTGGCTGGC 18

RESULT 32
US-08-863-639A-48/c
; Sequence 48, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-48

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCAGTG 250
Db 21 GTGGTGGTGGTGGTGGTG 1

RESULT 33
US-08-863-639A-76
; Sequence 76, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 76:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-76

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCAGTG 250
Db 1 GTGGTGGTGGTGGTGGTG 21

RESULT 34
US-09-726-774-65
; Sequence 65, Application US/09726774
; Patent No. 6677153
; GENERAL INFORMATION:

APPLICANT: Iversen, Patrick L.
TITLE OF INVENTION: Antisense Antibacterial Method and
FILE REFERENCE: 0450-0032.30
CURRENT APPLICATION NUMBER: US/09/726,774
CURRENT FILING DATE: 2000-11-29
PRIOR APPLICATION NUMBER: US 60/168,150
PRIOR FILING DATE: 1999-11-29
NUMBER OF SEQ ID NOS: 139
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 65
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: antisense oligomer
US-09-726-774-65

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1439 ATGCCATGAACATCCATTCT 1459
Db 1 ATGTCATGCAACATCCACTCT 21

RESULT 35
US-08-401-512-38/c
Sequence 39, Application US/08401512
Patent No. 5599673
GENERAL INFORMATION:
APPLICANT: Keating, Mark T.
APPLICANT: Curran, Mark B.
APPLICANT: Wang, Qing
TITLE OF INVENTION: Long QT Syndrome Genes
NUMBER OF SEQUENCES: 81
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005-3917
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/401,512
FILING DATE: 09-MAR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Saxe, Stephen A.
REGISTRATION NUMBER: 38,609
REFERENCE/DOCKET NUMBER: 19780-113879
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4848
TELEFAX: 202-962-8100
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 23 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-401-512-38

Query Match 0.9%; Score 16.2; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 698 CACTCAAGGAGATCAGACTGG 718
Db 22 CACACAGGAGATCAGACAGG 2

RESULT 36
US-09-544-398B-567
Sequence 567, Application US/09544398B
Patent No. 6770461
GENERAL INFORMATION:
APPLICANT: Carulli, John P.
APPLICANT: Little, Randall D.
APPLICANT: Recker, Robert R.
APPLICANT: Johnson, Mark L.
TITLE OF INVENTION: High bone mass gene of 11q13.3
FILE REFERENCE: 032796-013
CURRENT APPLICATION NUMBER: US/09/544,398B
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US 09/229,319
PRIOR FILING DATE: 1999-01-13
PRIOR APPLICATION NUMBER: US 60/071,449
PRIOR FILING DATE: 1998-01-13
PRIOR APPLICATION NUMBER: US 60/105,511
PRIOR FILING DATE: 1998-10-23
NUMBER OF SEQ ID NOS: 641
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 567
LENGTH: 24
TYPE: DNA
ORGANISM: Homo sapiens
US-09-544-398B-567

Query Match 0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 862 CTGAACAGTACTGATGATGAC 882
Db 1 CTGAACCACTACTGATGATGAC 21

RESULT 37
US-08-746-559A-7/c
Sequence 7, Application US/08746559A
Patent No. 6084085
GENERAL INFORMATION:
APPLICANT: Renato Baserga
APPLICANT: Mariana Resnicoff
APPLICANT: Consuelo D'Ambrosio
APPLICANT: Andre Ferber
TITLE OF INVENTION: Method of Inducing Resistance to Tumor Growth
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6084085ris LLP
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: WORDPERFECT 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/746,559A
FILING DATE: 13-NOV-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:


```
; APPLICATION NUMBER: 60/006,699
; FILING DATE: 14-NOV-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul K. Legard
; REGISTRATION NUMBER: 38,534
; REFERENCE/DOCKET NUMBER: TCU-2063
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-746-559A-7

Query Match 0.9%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCTCGA 1115
Db 16 GGTACCGGCCCTCGA 1

RESULT 38
US-09-696-791-760
; Sequence 760, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 760
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk7 ribozyme binding site
US-09-696-791-760

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 1 CTGGCAGATTTGGCCTGG 19

RESULT 39
US-09-696-791-761
; Sequence 761, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 761
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cyclin D2 ribozyme binding site
US-09-696-791-1893

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAACGAG 1011

; APPLICATION NUMBER: 60/006,699
; FILING DATE: 14-NOV-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul K. Legard
; REGISTRATION NUMBER: 38,534
; REFERENCE/DOCKET NUMBER: TCU-2063
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-746-559A-7

Query Match 0.9%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCTCGA 1115
Db 16 GGTACCGGCCCTCGA 1

RESULT 38
US-09-696-791-760
; Sequence 760, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 760
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cdk7 ribozyme binding site
US-09-696-791-760

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 1 CTGGCAGATTTGGCCTGG 19

RESULT 39
US-09-696-791-761
; Sequence 761, Application US/09696791
; Patent No. 6770633
; GENERAL INFORMATION:
; APPLICANT: Robbins, Joan M.
; APPLICANT: Tritz, Richard
; TITLE OF INVENTION: RIBOZYME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
; TITLE OF INVENTION: SKIN AND EYE DISEASES
; FILE REFERENCE: 480124.407
; CURRENT APPLICATION NUMBER: US/09/696,791
; CURRENT FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 4523
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 761
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Cyclin D2 ribozyme binding site
US-09-696-791-1893

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAACGAG 1011
```

Db
1 GAACCTGCTCACCATCGAG 19

RESULT 42

```

US-09-490-692-35
; Sequence 35, Application US/09490692
; Patent No. 6180353
; GENERAL INFORMATION:
; APPLICANT: Nicholas M. Dean
; APPLICANT: Lex M. Cowsett
; TITLE OF INVENTION: ANTISENSE MODUL
; FILE REFERENCE: RTS-0120
; CURRENT APPLICATION NUMBER: US/09/4
; CURRENT FILING DATE: 2000-01-24
; NUMBER OF SEQ ID NOS: 176
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligo
US-09-490-692-35

```

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels

QY 229 AGTGGTGGTGGCGGCA 247
Db 2 ATGGAGGTGGTGGCGGCA 20

RESULT 43

```

US-09-322-352A-5
; Sequence 5, Application US/09322352A
; Patent No. 6586192
; GENERAL INFORMATION:
; APPLICANT: PESCHLE, Cesare
; APPLICANT: ZIEGLER, Benedikt L
; TITLE OF INVENTION: Compositions and
; TITLE OF INVENTION: Populations in
; FILE REFERENCES: 9855-26U1
; CURRENT APPLICATION NUMBER: US/09/322-352A-5
; CURRENT FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: US 60/087,
; PRIOR FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 22
; TYPE: DNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: VEGFRII/Flt4 Pri
US-09-322-352A-5

```

Query Match 0.9%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 1.7e+02;
Matches 18; Conservative 0; Mismatches 4; Indels

OY
47 GACCAGCAGTGTGACTGCTGAA 68

Dd
1 GACAAGGAGTGTGACCACTGAA 22

RESULT 44

RESUBMIT 14
 S164305-2/c
 ; Patent No. 5164305
 ; APPLICANT: Wong, Hing C.
 ; TITLE OF INVENTION: STREPTOMYCES PROMOTER AND METHOD OF USE
 ; THEREOF
 ; NUMBER OF SEQUENCES: 4

```

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/466,981
; FILING DATE: 18-JAN-1990
; SEQ ID NO:2
; LENGTH: 22
5164305-2

```

| | | | | |
|-----------------------|--------------|--------------------|---------------|------------|
| Query Match | 0.9% | Score 15.6; | DB 1; | Length 22; |
| Best Local Similarity | 81.8% | Pred. No. 1.7e+02; | | |
| Matches 18; | Conservative | 0; | Mismatches 4; | Indels 0; |
| | | | | Gaps 0; |

QY 546 TGACAAGCCCTCTCAGCGCGCCG 567
Db 22 TGCCACGCCCGTGAGCGCGCCG 1

RESULT 45

US-08-244-269-35/c
; Sequence 35, Application US/08244269
; Patent No. 5620847
; GENERAL INFORMATION:
; APPLICANT: Greisen, Kay S.
; APPLICANT: Leong, Diane U.
; TITLE OF INVENTION: Methods and Reagents for Detection of
; TITLE OF INVENTION: Bacteria in Cerebrospinal Fluid
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hoffmann-La Roche Inc.
; STREET: 340 Kingsland Street
; CITY: Nutley
; STATE: NJ
; COUNTRY: U.S.A.
; ZIP: 07110-1199
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,269
; FILING DATE: 05-MAY-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/593,176
; FILING DATE: 05-OCT-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/696,448
; FILING DATE: 06-MAY-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/738,393
; FILING DATE: 31-JULY-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US 92/06365
; FILING DATE: 31-JULY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sias, Stacey R.
; REGISTRATION NUMBER: 32,630
; REFERENCE/DOCKET NUMBER: 8681
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (510) 814-2863
; TELEFAX: (510) 522-1285
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-244-269-35

Query Match 0.9%; Score 15.6; DB 1;
Best Local Similarity 81.8%; Pred. No. 1.9e+02;
Matches 18; Conservative 0; Mismatches 4; Indels

; NUMBER OF SEQUENCES: 4


```
; FILING DATE: 12/2/93
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Esmond, Robert W.
; REGISTRATION NUMBER: 32,893
; REFERENCE/DOCKET NUMBER: 0942.2580000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 49:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: both
; US-08-160-670A-49

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 233 GTGGTGGTGGCGGAGTGACCC 254
|||||
Db 24 GTGGTGGTGGTGGTGAGACC 3

RESULT 49
US-09-827-998-544
; Sequence 544, Application US/09827998
; Patent No. 6656700
; GENERAL INFORMATION:
; APPLICANT: Gu, Yizhong
; APPLICANT: Shannon, Mark
; TITLE OF INVENTION: NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN E
; FILE REFERENCE: MDMORF-8
; CURRENT APPLICATION NUMBER: US/09/827,998
; CURRENT FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 1881
; SOFTWARE: Acomica Sequence Listing Engine
; Patent No. 6656700
; SEQ ID NO 544
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-827-998-544

Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCACGG 303
|||||
Db 1 AACTTCGTTCTGCACGG 17

RESULT 50
US-08-776-900C-24/c
; Sequence 24, Application US/08776900C
; Patent No. 6020477
; GENERAL INFORMATION:
; APPLICANT: DIU, Anita; FAUCHEU, Chi; Hercend, Thierry;
; APPLICANT: LALANNE, Jean-Louis; LIVINGSTON, David and
; APPLICANT: SU, Michael
; TITLE OF INVENTION: DNA SEQUENCES CODING FOR THE HUMAN
; TITLE OF INVENTION: PROTEINS TX AND TY RELATED TO THE
; TITLE OF INVENTION: INTERLEUKIN-1BETA CONVERTING ENZYME
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BIERMAN & MUSERLIAN
```

```
; STREET: 600 THIRD AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10016
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,900C
; FILING DATE: 30-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/FR95/01035
; FILING DATE: 01-AUG-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR/94/09567
; FILING DATE: 02-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: CHARLES A. MUSERLIAN
; REGISTRATION NUMBER: 19,683
; REFERENCE/DOCKET NUMBER: 146.1265
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 661-8000
; TELEFAX: (212) 661-8002
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; OTHER INFORMATION: SEQ ID NO: 22 from 685 to 703
; US-08-776-900C-24

Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1436 AGGATGCCATGAACAT 1452
|||||
Db 18 AGGATGCCATGAACAT 2

RESULT 51
US-09-268-195C-24/c
; Sequence 24, Application US/09268195C
; Patent No. 6180386
; GENERAL INFORMATION:
; APPLICANT: ROUSSEL UCLAF
; TITLE OF INVENTION: DNA SEQUENCES CODING FOR THE HUMAN
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ROUSSEL UCLAF
; STREET: 102, Route de No. 6180386sy
; CITY: ROMAINVILLE
; COUNTRY: FRANCE
; ZIP: 93230
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30 (OEB)
; SOFTWARE: + Corrections under WORDPERFECT 5.1 for SEQ ID NO 22
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/268,195C
; FILING DATE: 15-MAR-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR 9409567
; FILING DATE: AUG-02-1994
```



```
; NAME: Jarrell Ph.D., Brenda H.
; REGISTRATION NUMBER: 39,223
; REFERENCE/DOCKET NUMBER: 0092662-0012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 248-5000
; TELEFAX: (617) 248-4000
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "primer"
; IMMEDIATE SOURCE:
; CLONE: Exon 5 sense primer
;
US-09-617-871-24

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 992 AGAAGCTGCTCATCAAC 1008
   |||||
Db 4 AGAAGCTGCTCATCAAC 20

RESULT 55
US-09-065-040-6/c
; Sequence 6, Application US/09065040
; Patent No. 6541217
; GENERAL INFORMATION:
; APPLICANT: Hiraoka, Atsunobu
; APPLICANT: Sugimura, Atsushi
; APPLICANT: Mio, Hiroyuki
; TITLE OF INVENTION: HEMATOPOIETIC STEM CELL GROWTH FACTOR
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT &
; ADDRESSEE: DUNNER, LLP
; STREET: 1300 I Street, NW
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/065,040
; FILING DATE: 27-APR-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 262252/1996
; FILING DATE: 27-AUG-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 087242/1997
; FILING DATE: 24-MAR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/JP97/02349
; FILING DATE: 07-JUL-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordie, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 04853.0026-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4400
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
```

```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic DNA"
;
US-09-065-040-6

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 614 CCTACATTAAGCTGGAC 630
   |||||
Db 19 CCTGCATTAAGCTGGAC 3

RESULT 56
US-09-657-472-2081
; Sequence 2081, Application US/09657472
; Patent No. 6727063
; GENERAL INFORMATION:
; APPLICANT: Lander, Eric S.
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; APPLICANT: Bolk, Stacey
; APPLICANT: Daley, George Q.
; APPLICANT: McCarthy, Jeanette J.
; TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHISMS IN GENES
; FILE REFERENCE: 2825.1027-001
; CURRENT APPLICATION NUMBER: US/09/657,472
; CURRENT FILING DATE: 2000-09-07
; PRIOR APPLICATION NUMBER: US 60/153,357
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/220,947
; PRIOR FILING DATE: 2000-07-26
; PRIOR APPLICATION NUMBER: US 60/225,724
; PRIOR FILING DATE: 2000-08-16
; NUMBER OF SEQ ID NOS: 2551
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2081
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
;
US-09-657-472-2081

Query Match      0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 1.8e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045
   |||||
Db 3 CTCGGTGAYTTTGGCCTGG 21

RESULT 57
US-09-198-243-2
; Sequence 2, Application US/09198243
; Patent No. 6183999
; GENERAL INFORMATION:
; APPLICANT: WEIMER, Thomas
; APPLICANT: GROENER, Albrecht
; TITLE OF INVENTION: Procedure for the detection of high virus
; TITLE OF INVENTION: concentrations in blood plasma and/or blood serum by
; TITLE OF INVENTION: means of the polymerase chain reaction
; FILE REFERENCE: 06478.1419-00000
; CURRENT APPLICATION NUMBER: US/09/198,243
; CURRENT FILING DATE: 1998-11-24
; EARLIER APPLICATION NUMBER: P 197 52 898.9
; EARLIER FILING DATE: 1997-11-28
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 23
```

```
; TYPE: DNA
; ORGANISM: Parvovirus B19
; FEATURE:
; OTHER INFORMATION:
US-09-198-243-2

Query Match          0.9%; Score 15.4; DB 1; Length 23;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1226 AGGACAGCTACACTTC 1242
    ||| ||||| |||||
Db 2 AGGCACAGCTACACTTC 18

RESULT 58
US-08-009-263C-34/c
; Sequence 34, Application US/08009263C
; Patent No. 5442049
; GENERAL INFORMATION:
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker
; TITLE OF INVENTION: Oligonucleotides for Modulating the
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 88
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz
; ADDRESSEE: Mackiewicz & No. 5442049ris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERCT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/009,263C
; FILING DATE: January 25, 1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 927,506
; FILING DATE: No. 5442049ember 19, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0844
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 34:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-009-263C-34

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGTCAACG 149
    ||| ||||| |||||
Db 20 CGCAAGAGAGAGGACAAACG 1

RESULT 59
US-09-357-072-81

; Sequence 81, Application US/09357072
; Patent No. 6015712
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Brenda F. Baker
; APPLICANT: Hong Zhang
; APPLICANT: Lex M. Cowbert
; TITLE OF INVENTION: ANTISENSE MODULATION OF FADD EXPRESSION
; FILE REFERENCE: RTS-0027
; CURRENT APPLICATION NUMBER: US/09/357,072
; CURRENT FILING DATE: 1999-07-19
; NUMBER OF SEQ ID NOS: 87
; SEQ ID NO 81
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-357-072-81

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 46 GGACCAGCAGTGTGACTGCT 65
    ||| ||||| |||||
Db 1 GGAGTAACAGTGTGACTGCT 20

RESULT 60
US-09-205-428-3
; Sequence 3, Application US/09205428
; Patent No. 6068991
; GENERAL INFORMATION:
; APPLICANT: Liu, Suo W.
; APPLICANT: Franceschini, Thomas J.
; TITLE OF INVENTION: HIGH EXPRESSION ESCHERICHIA COLI EXPRESSION VECTOR
; FILE REFERENCE: ON0162aSequence
; CURRENT APPLICATION NUMBER: US/09/205,428
; CURRENT FILING DATE: 1998-12-04
; EARLIER APPLICATION NUMBER: 60/069,751
; EARLIER FILING DATE: 1997-12-16
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Escherichia coli
US-09-205-428-3

Query Match          0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1433 CAGAGGATGCCATGAACAT 1452
    ||||| ||||| |||||
Db 1 CAGAGGATATCATGAAAAAT 20

RESULT 61
US-09-286-904-29/c
; Sequence 29, Application US/09286904A
; Patent No. 6140124
; GENERAL INFORMATION:
; APPLICANT: Monia, Brett P.
; APPLICANT: Gaarde, William A.
; APPLICANT: Nero, Pamela S.
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: Antisense Oligonucleotide Modulation of p38 Mitogen
; TITLE OF INVENTION: Activated Protein Kinase Expression
; FILE REFERENCE: ISPH-0347
; CURRENT APPLICATION NUMBER: US/09/286,904A
; CURRENT FILING DATE: 1999-04-06
```

; NUMBER OF SEQ ID NOS: 95
; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 29
; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: antisense sequence

US-09-286-904-29

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAGGACCTCAACAC 783

Db 20 TGCTCAGCACCCTGAGCAC 1

RESULT 62

US-08-838-715B-34/c

; Sequence 34, Application US/08838715B

; Patent No. 6153595

; GENERAL INFORMATION:

; APPLICANT: Draper, Chapman, Kisner, Anderson

; TITLE OF INVENTION: Composition and Method for Treatment

; TITLE OF INVENTION: of CMV Infection

; NUMBER OF SEQUENCES: 90

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Jane Massey Licata, Esq.

; STREET: 66 E. Main Street

; CITY: Marlton

; STATE: NJ

; COUNTRY: USA

; ZIP: 08053

; COMPUTER READABLE FORM:

; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE

; COMPUTER: IBM 486

; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS

; SOFTWARE: WORDPERFECT 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/838,715B

; FILING DATE: April 9, 1997

; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 07/568,366

; FILING DATE: 8/16/90

; APPLICATION NUMBER: 07/927,506

; FILING DATE: 11/19/92

; APPLICATION NUMBER: 08/009,263

; FILING DATE: 1/25/93

; APPLICATION NUMBER: 08/233,711

; FILING DATE: 4/26/94

; ATTORNEY/AGENT INFORMATION:

; NAME: Jane Massey Licata

; REGISTRATION NUMBER: 32,257

; REFERENCE/DOCKET NUMBER: ISPH-0204

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (609) 779-2400

; TELEFAX: (609) 810-1454

; INFORMATION FOR SEQ ID NO: 34:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 20 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; HYPOTHETICAL: NO

; ANTI-SENSE: YES

US-08-838-715B-34

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149

Db 20 CGCAAGAAGAAGAGCAACG 1

RESULT 63

US-08-838-715B-89/c

; Sequence 89, Application US/08838715B

; Patent No. 6153595

; GENERAL INFORMATION:

; APPLICANT: Draper, Chapman, Kisner, Anderson

; TITLE OF INVENTION: Composition and Method for Treatment

; TITLE OF INVENTION: of CMV Infection

; NUMBER OF SEQUENCES: 90

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Jane Massey Licata, Esq.

; STREET: 66 E. Main Street

; CITY: Marlton

; STATE: NJ

; COUNTRY: USA

; ZIP: 08053

; COMPUTER READABLE FORM:

; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE

; COMPUTER: IBM 486

; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS

; SOFTWARE: WORDPERFECT 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/838,715B

; FILING DATE: April 9, 1997

; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 07/568,366

; FILING DATE: 8/16/90

; APPLICATION NUMBER: 07/927,506

; FILING DATE: 11/19/92

; APPLICATION NUMBER: 08/009,263

; FILING DATE: 1/25/93

; APPLICATION NUMBER: 08/233,711

; FILING DATE: 4/26/94

; ATTORNEY/AGENT INFORMATION:

; NAME: Jane Massey Licata

; REGISTRATION NUMBER: 32,257

; REFERENCE/DOCKET NUMBER: ISPH-0204

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (609) 779-2400

; TELEFAX: (609) 810-1454

; INFORMATION FOR SEQ ID NO: 89:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 20 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; HYPOTHETICAL: NO

; ANTI-SENSE: NO

US-08-838-715B-89

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149

Db 20 CGCAAGAAGAAGAGCAACG 1

RESULT 64

US-09-359-756-8

; Sequence 8, Application US/09359756

; Patent No. 6168950

; GENERAL INFORMATION:


```

; APPLICANT: Brett P. Monia
; APPLICANT: William Gaarde
; APPLICANT: Donna T. Ward
; APPLICANT: Lex M. Cowser
; TITLE OF INVENTION: ANTISENSE MODULATION OF MEK1 EXPRESSION
; FILE REFERENCE: RTS-0077
; CURRENT APPLICATION NUMBER: US/09/359,756
; CURRENT FILING DATE: 1999-07-23
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 8
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-359-756-8

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 552 GCCCTCAGCGCGCCTCC 571
Db 1 GCTCCTCGCGCGCCTGC 20

RESULT 65
US-08-679-645-1259/c
; Sequence 1259, Application US/08679645
; Patent No. 6350934
; GENERAL INFORMATION:
; APPLICANT: Zwick, Michael G.
; APPLICANT: Edington, Brent E.
; APPLICANT: McSwiggen, James A.
; APPLICANT: Merlo, Patricia Ann Owens
; APPLICANT: Guo, Lining
; APPLICANT: Skokut, Thomas A.
; APPLICANT: Young, Scott A.
; APPLICANT: Folkerts, Otto
; APPLICANT: Merlo, Donald J.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR
; TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
; TITLE OF INVENTION: IN PLANTS
; NUMBER OF SEQUENCES: 1263
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/679,645
; FILING DATE: July 12, 1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/001,135
; FILING DATE: July 13, 1995
; APPLICATION NUMBER: 08/300,726
; FILING DATE: September 2, 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 219/247
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600

; APPLICANT: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1259:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-679-645-1259

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 377 CTTGAGCCAGTCTCGGAT 396
Db 20 CATGACCCAGCATCGGAT 1

RESULT 66
US-09-580-189-14/c
; Sequence 14, Application US/09580189
; Patent No. 6358688
; GENERAL INFORMATION:
; APPLICANT: Lim, David J.
; APPLICANT: Chun, Young-Myoung
; APPLICANT: Rhim, John S.
; TITLE OF INVENTION: IMMORTALIZED HUMAN MIDDLE EAR EPITHELIAL CELL LINE
; FILE REFERENCE: House Ear Institute/09902812
; CURRENT APPLICATION NUMBER: US/09/580,189
; CURRENT FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/136,736
; PRIOR FILING DATE: 1999-05-28
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-580-189-14

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1326 CAAGTACCGAGCGAGGCC 1345
Db 20 CAAGTACTCAGCAGAGGCC 1

RESULT 67
US-09-702-327-54/c
; Sequence 54, Application US/09702327
; Patent No. 6426220
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Lex M. Cowser
; TITLE OF INVENTION: ANTISENSE MODULATION OF CALRETICULIN EXPRESSION
; FILE REFERENCE: RTS-0097
; CURRENT APPLICATION NUMBER: US/09/702,327
; CURRENT FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 54
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-702-327-54

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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QY 540 CATCTTTGACAGCCCTCA 559
|||||
Db 20 CATCTTTGACAACTTCTCA 1

RESULT 68
US-09-792-594-83/c
; Sequence 83, Application US/09792594
; Patent No. 6436706
; GENERAL INFORMATION:
; APPLICANT: Donna T. Ward
; APPLICANT: Andrew T. Watt
; TITLE OF INVENTION: ANTISENSE MODULATION OF RECQL4 EXPRESSION
; FILE REFERENCE: RTS-0209
; CURRENT APPLICATION NUMBER: US/09/792,594
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 83
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-792-594-83

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1160 GGGGTGTGGGTGCATCTTC 1179
|||||
Db 20 GGGCTGTGGCCGCGCATCTTC 1

RESULT 69
US-09-676-610B-172
; Sequence 172, Application US/09676610B
; Patent No. 6444465
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Jacqueline Wyatt
; APPLICANT: Susan M. Freier
; TITLE OF INVENTION: OLIGONUCLEOTIDE INHIBITION OF HER-1 EXPRESSION
; FILE REFERENCE: RTS-0138
; CURRENT APPLICATION NUMBER: US/09/676,610B
; CURRENT FILING DATE: 2000-09-29
; NUMBER OF SEQ ID NOS: 182
; SEQ ID NO 172
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-676-610B-172

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGCGCAGGATGTG 969
|||||
Db 1 AATGCCACCGCAGGATGTG 20

RESULT 70
US-09-640-101-29/c
; Sequence 29, Application US/09640101
; Patent No. 6448079
; GENERAL INFORMATION:
; APPLICANT: Monia, Brett P.
; APPLICANT: Gaarde, William A.
; APPLICANT: Nero, Pamela S.

; APPLICANT: McKay, Robert
; TITLE OF INVENTION: Antisense Modulation of p38 Mitogen
; TITLE OF INVENTION: Activated Protein Kinase Expression
; FILE REFERENCE: ISPH-0488
; CURRENT APPLICATION NUMBER: US/09/640,101
; CURRENT FILING DATE: 2000-08-15
; PRIOR APPLICATION NUMBER: 09/286,904
; PRIOR FILING DATE: 1999-04-06
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: antisense sequence
US-09-640-101-29

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAAGCACCTCAACAC 783
|||||
Db 20 TGCTCAAGCACCTGAAGCAC 1

RESULT 71
US-09-860-473-163/c
; Sequence 163, Application US/09860473
; Patent No. 6656732
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Andrew T. Watt
; TITLE OF INVENTION: ANTISENSE MODULATION OF SRC-C EXPRESSION
; FILE REFERENCE: RTS-0222
; CURRENT APPLICATION NUMBER: US/09/860,473
; CURRENT FILING DATE: 2001-05-18
; NUMBER OF SEQ ID NOS: 169
; SEQ ID NO 163
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-860-473-163

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGGCC 1047
|||||
Db 20 TGGCCGACTTTGGGTGGCC 1

RESULT 72
US-09-133-352B-11
; Sequence 11, Application US/09133352B
; Patent No. 6703209
; GENERAL INFORMATION:
; APPLICANT: Manfred Baetscher
; APPLICANT: Gottfried Brem
; TITLE OF INVENTION: Porcine Totipotent Cells and Method for Long-Term Culture
; FILE REFERENCE: 61750-212
; CURRENT APPLICATION NUMBER: US/09/133,352B
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/055643
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Microsoft Word 6.0
; SEQ ID NO 11
; LENGTH: 20

; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; NAME/KEY:
; LOCATION:
; OTHER INFORMATION: PCR primer
US-09-133-352B-11

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 424 ATGCGCAACCATCCCCACG 443
||||| ||||| ||||| |||||
Db 1 ATGCGCACCATCCCCCAAG 20

RESULT 73
US-08-009-263C-22/c
; Sequence 22, Application US/08009263C
; Patent No. 5442049
; GENERAL INFORMATION:
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker
; TITLE OF INVENTION: Oligonucleotides for Modulating the
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 88
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz
; ADDRESSEE: Mackiewicz & No. 5442049ris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/009,263C
; FILING DATE: January 25, 1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 927,506
; FILING DATE: No. 5442049ember 19, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0844
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-009-263C-22

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
||||| ||||| ||||| |||||
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 74
US-08-009-263C-88
; Sequence 88, Application US/08009263C
; Patent No. 5442049
; GENERAL INFORMATION:
; APPLICANT: Kevin Anderson, Kenneth Draper, Brenda Baker
; TITLE OF INVENTION: Oligonucleotides for Modulating the
; TITLE OF INVENTION: Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 88
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz
; ADDRESSEE: Mackiewicz & No. 5442049ris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/009,263C
; FILING DATE: January 25, 1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 927,506
; FILING DATE: No. 5442049ember 19, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0844
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 88:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-08-009-263C-88
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
||||| ||||| ||||| |||||
Db 1 CGCAAGAGAGAGCAACG 20

RESULT 75
US-08-468-447-7/c
; Sequence 7, Application US/08468447
; Patent No. 5576302
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook and Glenn Hoke
; TITLE OF INVENTION: Oligonucleotides for Modulating
; TITLE OF INVENTION: Hepatitis C Virus Having Phosphorothioate Linkages Of High Chi
; NUMBER OF SEQUENCES: 16
; TITLE OF INVENTION: Purity
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5576302ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA: US/08/468,447
; APPLICATION NUMBER: US/08/468,447
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2008
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-468-447-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGAGCAACG 2

RESULT 76
US-08-469-851A-7/c
; Sequence 7, Application US/08469851A
; Patent No. 5587361
; GENERAL INFORMATION:
; APPLICANT: Cook and Hoke
; TITLE OF INVENTION: OLIGONUCLEOTIDES HAVING PHOSPHOROTHIOATE
; TITLE OF INVENTION: LINKAGES OF HIGH CHIRAL PURITY
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5587361iris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,851A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:

```

```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-469-851A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGAGCAACG 2

RESULT 77
US-07-927-506-22/c
; Sequence 22, Application US/07927506
; Patent No. 5591720
; GENERAL INFORMATION:
; APPLICANT: Anderson, Kevin P.
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: Oligonucleotides for Modulating
; TITLE OF INVENTION: the Effects of Cytomegalovirus Infections
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
; ADDRESSEE: No. 5591720iris
; STREET: One Liberty Place -- 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb
; MEDIUM TYPE: STORAGE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: WORDPERFECT 5.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/927,506
; FILING DATE: 19921119
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Licata, Jane M.
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISIS-0408
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-07-927-506-22

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGAGCAACG 2

RESULT 78

```

US-08-233-711-1/c
; Sequence 1, Application US/08233711
; Patent No. 5595978
; GENERAL INFORMATION:
; APPLICANT: Draper, Chapman and Kisper
; TITLE OF INVENTION: Composition and Method for Treating
; TITLE OF INVENTION: CMV Infections
; NUMBER OF SEQUENCES: 1
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Jane Massey Licata, Esq.
; STREET: 210 Lake Drive East, Suite 201
; CITY: Cherry Hill
; STATE: NJ
; COUNTRY: USA
; ZIP: 08002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/233.711
; FILING DATE: herewith
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/568,366
; FILING DATE: 8/16/90
; APPLICATION NUMBER: PCT/US91/05815
; FILING DATE: 8/14/91
; APPLICATION NUMBER: 07/927,506
; FILING DATE: 11/19/92
; APPLICATION NUMBER: 08/009,263
; FILING DATE: 1/25/93
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISPH-0093
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (609) 779-2400
; TELEFAX: (609) 779-8488
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-233-711-1
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAAGAGCAACG 2
RESULT 79
US-08-467-597A-7/c
; Sequence 7, Application US/08467597A
; Patent No. 5607923
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook and Glenn Hoke
; TITLE OF INVENTION: Oligonucleotides For Modulating
; TITLE OF INVENTION: Cytomegalovirus Having Phosphorothioate Linkages Of High Chir
; TITLE OF INVENTION: Purity
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5607923ris
; STREET: One Liberty Place - 46th Floor

CITY: Philadelphia
STATE: PA
COUNTRY: U.S.A.
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 720 Kb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,597A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 297,703
FILING DATE: 29-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Joseph Lucci
REGISTRATION NUMBER: 33,307
REFERENCE/DOCKET NUMBER: ISIS-2007
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 21
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-467-597A-7
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAAGAGCAACG 2
RESULT 80
US-08-468-569A-7/c
; Sequence 7, Application US/08468569A
; Patent No. 5620963
; GENERAL INFORMATION:
; APPLICANT: Cook and Hoke
; TITLE OF INVENTION: OLIGONUCLEOTIDES FOR MODULATING PROTEIN
; TITLE OF INVENTION: KINASE C HAIVING PHOSPHOROTHIOATE LINKAGES
; TITLE OF INVENTION: AND HIGH CHIRAL PURITY
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5620963ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 720 Kb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,569A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 297,703
FILING DATE: 29-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Joseph Lucci
REGISTRATION NUMBER: 33,307

REFERENCE/DOCKET NUMBER: ISIS-2009
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 21
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-468-569A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 81
US-08-113-993A-1/c
Sequence 1, Application US/08113993A
Patent No. 5629150
GENERAL INFORMATION:
APPLICANT: Tadeusz Kzysztow Wyrzykiewicz
TITLE OF INVENTION: METHODS FOR CHARACTERIZING
TITLE OF INVENTION: PHOSPHOROTHIOATE OLIGONUCLEOTIDES
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
ADDRESSEE: No. 5629150ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: WORDPERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/113,993A
FILING DATE: August 30, 1993
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: John W. Caldwell
REGISTRATION NUMBER: 28,937
REFERENCE/DOCKET NUMBER: ISIS-1118
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEFAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 21
TYPE: nucleotide
STRANDEDNESS: single
TOPOLOGY: unknown
US-08-113-993A-1

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 82
US-08-466-692A-7/c
Sequence 7, Application US/08466692A
Patent No. 5654284
GENERAL INFORMATION:
APPLICANT: Cook and Hoke
TITLE OF INVENTION: OLIGONUCLEOTIDES FOR MODULATING RAF KINASE
TITLE OF INVENTION: HAVING PHOSPHOROTHIOATE LINKAGES OF HIGH
TITLE OF INVENTION: CHIRAL PURITY
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5654284ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: U.S.A.
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 720 Kb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,692A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 297,703
FILING DATE: 29-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Joseph Luccl
REGISTRATION NUMBER: 33,307
REFERENCE/DOCKET NUMBER: ISIS-2010
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 21
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-466-692A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 83
US-08-471-966A-7/c
Sequence 7, Application US/08471966A
Patent No. 5661134
GENERAL INFORMATION:
APPLICANT: Phillip Dan Cook and Glenn Hoke
TITLE OF INVENTION: Oligonucleotides For Modulating Ha-ras or
TITLE OF INVENTION: Ki-ras Having Phosphorothioate Linkages Of High Chiral Purity
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5661134ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: U.S.A.
ZIP: 19103
COMPUTER READABLE FORM:

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; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/471,966A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 297,703
; FILING DATE: 29-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucchi
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-471-966A-7

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 84
US-08-784-498-1/c
; Sequence 1, Application US/08784498
; Patent No. 5767102
; GENERAL INFORMATION:
; APPLICANT: Draper, Chapman and Kisser
; TITLE OF INVENTION: Composition and Method for Treating
; NUMBER OF SEQUENCES: 1
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Jane Massey Licata, Esq.
; STREET: 210 Lake Drive East, Suite 201
; CITY: Cherry Hill
; STATE: NJ
; COUNTRY: USA
; ZIP: 08002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,498
; FILING DATE: 17-JAN-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/233,711
; FILING DATE: 26-APR-1994
; APPLICATION NUMBER: 07/568,366
; FILING DATE: 8/16/90 PCT/US91/05815
; APPLICATION NUMBER:
; FILING DATE: 8/14/91
; APPLICATION NUMBER: 07/927,506
; FILING DATE: 11/19/92
; APPLICATION NUMBER: 08/009,263
; FILING DATE: 1/25/93
; ATTORNEY/AGENT INFORMATION:

; NAME: Jane Massey Licata
; REGISTRATION NUMBER: 32,257
; REFERENCE/DOCKET NUMBER: ISPH-0093
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (609) 779-2400
; TELEFAX: (609) 779-8488
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-784-498-1

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 85
US-08-451-777A-10
; Sequence 10, Application US/08451777A
; Patent No. 5789223
; GENERAL INFORMATION:
; APPLICANT: Bergsma, Derk J.
; TITLE OF INVENTION: Human Galactokinase Gene
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corp./Corporate
; ADDRESSEE: Intellectual Property
; STREET: 709 Swedeland Road/UW220
; CITY: King of Prussia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/451,777A
; FILING DATE: 26-MAY-1995
; CLASSIFICATION: 436
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/10825
; FILING DATE: 23-SEP-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Eagle, Alissa M.
; REGISTRATION NUMBER: 37,126
; REFERENCE/DOCKET NUMBER: P50268-1B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-270-5364
; TELEFAX: 610-270-5090
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-451-777A-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;

```

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGGTGGCTGG 946
|||||
Db 2 CCAGCAGCTCCGGCAGCTGG 21

RESULT 86

US-08-249-386A-24/c
; Sequence 24, Application US/08249386A
; Patent No. 5801235
; GENERAL INFORMATION:
; APPLICANT: Gregory S. Pari
; TITLE OF INVENTION: Oligonucleotides with Anti-Cytomegalovirus
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/249,386A
; FILING DATE: May 25, 1994
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-020
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-249-386A-24

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
|||
Db 21 CGCAAGAAGAGAGCAACG 2

RESULT 87

US-08-451-778A-10
; Sequence 10, Application US/08451778A
; Patent No. 5830649
; GENERAL INFORMATION:
; APPLICANT: Bergsma, Derk J.
; APPLICANT: Stambolian, Dwight
; TITLE OF INVENTION: Human Galactokinase Gene
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corp./Corporate
; ADDRESSEE: Intellectual Property
; STREET: 709 Swedeland Road/UW2220
; CITY: King of Prussia

STATE: Pennsylvania
COUNTRY: USA
ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,778A
FILING DATE: 26-MAY-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/10825
FILING DATE: 23-SEP-1994
ATTORNEY/AGENT INFORMATION:
NAME: Eagle, Alissa M.
REGISTRATION NUMBER: 37,126
REFERENCE/DOCKET NUMBER: P50268-1B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5364
TELEFAX: 610-270-5090
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-451-778A-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGGTGGCTGG 946
|||||
Db 2 CCAGCAGCTCCGGCAGCTGG 21

RESULT 88

US-08-468-037A-18/c
; Sequence 18, Application US/08468037A
; Patent No. 5859221
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: A. Kawasaki
; TITLE OF INVENTION: 2'-Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5859221ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 720 Kb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Wordperfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,037A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 835,932
FILING DATE: 05-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Joseph Lucci
REGISTRATION NUMBER: 33,307
REFERENCE/DOCKET NUMBER: ISIS-2004
TELECOMMUNICATION INFORMATION:


```

; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-468-037A-18

Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02; 3; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGAGCAACG 2

RESULT 89
US-08-468-037A-19/c
; Sequence 19, Application US/08468037A
; Patent No. 5859221
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: A. Kawasaki
; TITLE OF INVENTION: 2'-Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5859221ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/468,037A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 835,932
; FILING DATE: 05-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3400
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-468-037A-19

Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02; 3; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGAGCAACG 2

RESULT 90
US-08-471-973A-18/c
; Sequence 18, Application US/08471973A
; Patent No. 5872232
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: Andrew Kawasaki
; TITLE OF INVENTION: Sugar Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5872232ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/471,973A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 835,932
; FILING DATE: 05-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
US-08-471-973A-18

Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02; 3; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGAGCAACG 2

RESULT 91
US-08-471-973A-19/c
; Sequence 19, Application US/08471973A
; Patent No. 5872232
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: Andrew Kawasaki
; TITLE OF INVENTION: Sugar Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and No. 5872232ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

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;; SOFTWARE: WordPerfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/471,973A
;; FILING DATE: 06-JUN-1995
;; CLASSIFICATION: 514
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 835,932
;; FILING DATE: 05-MAR-1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Joseph Lucci
;; REGISTRATION NUMBER: 33,307
;; REFERENCE/DOCKET NUMBER: ISIS-2005
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 215-568-3100
;; TELEFAX: 215-568-3439
;; INFORMATION FOR SEQ ID NO: 19:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 21 bases
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; ANTI-SENSE: yes
;; US-08-471-973A-19

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 92
US-08-998-208-10
; Sequence 10, Application US/08998208
; Patent No. 5880105
; GENERAL INFORMATION:
; APPLICANT: Bergema, Derk J.
; APPLICANT: Stambolian, Dwight
; TITLE OF INVENTION: Human Galactokinase Gene
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corp./Corporate
; ADDRESSEE: Intellectual Property
; STREET: 709 Swedeland Road/UW2220
; CITY: King of Prussia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,208
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/451,777
; FILING DATE: 26-MAY-1995
; APPLICATION NUMBER: PCT/US94/10825
; FILING DATE: 23-SEP-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Eagle, Alissa M.
; REGISTRATION NUMBER: 37,126
; REFERENCE/DOCKET NUMBER: P50268-1B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-270-5364
; TELEFAX: 610-270-5090
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:

;; LENGTH: 21 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (genomic)
;; US-08-998-208-10

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGCTGGCTGG 946
||||| ||||| |||||
Db 2 CCAGCAGCTCCGCGACCTGG 21

RESULT 93
US-08-465-880-23/c
; Sequence 23, Application US/08465880
; Patent No. 5955589
; GENERAL INFORMATION:
; APPLICANT: Philip Dan Cook
; TITLE OF INVENTION: Gapped 2' Modified Oligonucleotides
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5955589ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,880
; FILING DATE: Herewith
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 244,993
; FILING DATE: 21-JUN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; ANTI-SENSE: yes
; US-08-465-880-23

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 94
US-08-465-880-24/c
; Sequence 24, Application US/08465880
; Patent No. 5955589
; GENERAL INFORMATION:

Tue Nov 2 13:39:13 2004

APPLICANT: Philip Dan Cook
TITLE OF INVENTION: Gapped 2' Modified Oligonucleotides
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5955589ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: U.S.A.
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 720 Kb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/465,880
FILING DATE: Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 244,993
FILING DATE: 21-JUN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Joseph Lucci
REGISTRATION NUMBER: 33,307
REFERENCE/DOCKET NUMBER: ISIS-2002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 bases
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
ANTI-SENSE: yes
US-08-465-880-24
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGACCAACG 2
RESULT 95
US-08-863-639A-36/c
Sequence 36, Application US/08863639A
Patent No. 5981185
GENERAL INFORMATION:
APPLICANT: Matson, Robert S.
APPLICANT: Coassin, Peter J.
APPLICANT: Rampal, Jang B.
APPLICANT: Caskey, C. T.
TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheldon & Mak
STREET: 225 South Lake Avenue, 9th Floor
CITY: Pasadena
STATE: CA
COUNTRY: USA
ZIP: 91101
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: Corel WordPerfect 8 version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/863,639A
FILING DATE: May 28, 1997

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Joseph E. Mueth
REGISTRATION NUMBER: 20,532
REFERENCE/DOCKET NUMBER: 11859-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (626) 796-4000
TELEFAX: (626) 795-6321
INFORMATION FOR SEQ ID NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Other nucleic acid
US-08-863-639A-36
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 230 GTGGTGGTGGTGGCGCAGT 249
DB 20 GTGGTGGTGGTGGTGGT 1
RESULT 96
US-08-863-639A-50/c
Sequence 50, Application US/08863639A
Patent No. 5981185
GENERAL INFORMATION:
APPLICANT: Matson, Robert S.
APPLICANT: Coassin, Peter J.
APPLICANT: Rampal, Jang B.
APPLICANT: Caskey, C. T.
TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheldon & Mak
STREET: 225 South Lake Avenue, 9th Floor
CITY: Pasadena
STATE: CA
COUNTRY: USA
ZIP: 91101
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: Corel WordPerfect 8 version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/863,639A
FILING DATE: May 28, 1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Joseph E. Mueth
REGISTRATION NUMBER: 20,532
REFERENCE/DOCKET NUMBER: 11859-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (626) 796-4000
TELEFAX: (626) 795-6321
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Other nucleic acid
US-08-863-639A-50
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 231 TGGTGGTGGTGGCGGCGAGT 250
|||||
Db 21 TGGTGGTGGTGGTGGTGGT 2

RESULT 97
US-08-863-639A-73
; Sequence 73, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA
; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 73:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-73

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCGAGT 249
|||||
Db 2 GTGGTGGTGGTGGTGGTGGT 21

RESULT 98
US-08-863-639A-88
; Sequence 88, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
; APPLICANT: Matson, Robert S.
; APPLICANT: Coassin, Peter J.
; APPLICANT: Rampal, Jang B.
; APPLICANT: Caskey, C. T.
; TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
; NUMBER OF SEQUENCES: 95
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheldon & Mak
; STREET: 225 South Lake Avenue, 9th Floor
; CITY: Pasadena
; STATE: CA

; COUNTRY: USA
; ZIP: 91101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Corel WordPerfect 8 version
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/863,639A
; FILING DATE: May 28, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph E. Mueth
; REGISTRATION NUMBER: 20,532
; REFERENCE/DOCKET NUMBER: 11859-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (626) 796-4000
; TELEFAX: (626) 795-6321
; INFORMATION FOR SEQ ID NO: 88:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Other nucleic acid
US-08-863-639A-88

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 231 TGGTGGTGGTGGCGGCGAGT 250
|||||
Db 1 TGGTGGTGGTGGTGGTGGT 20

RESULT 99
US-09-035-357-18/c
; Sequence 18, Application US/09035357
; Patent No. 6005087
; GENERAL INFORMATION:
; APPLICANT: Phillip Dan Cook
; APPLICANT: A. Kawasaki
; TITLE OF INVENTION: 2'-Modified Oligonucleotides
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 6005087ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch disk, 720 Kb
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/035,357
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/469,037
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Joseph Lucci
; REGISTRATION NUMBER: 33,307
; REFERENCE/DOCKET NUMBER: ISIS-2004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-568-3100
; TELEFAX: 215-568-3439
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS: